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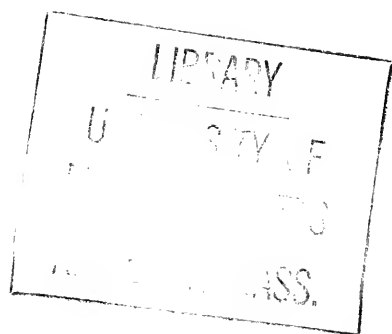


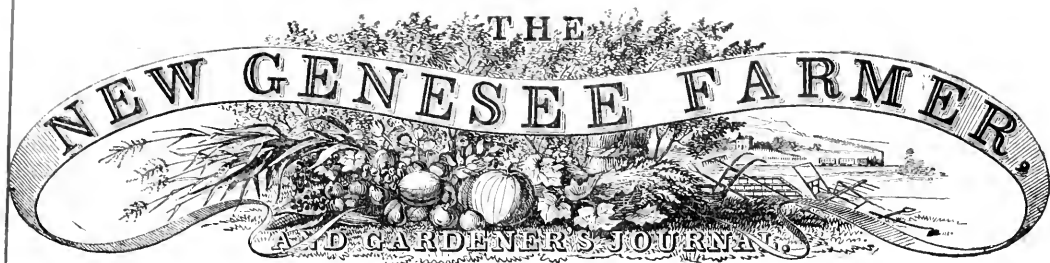
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A Monthly Publication, Devoted to the Improvement of

AGRICULTURE AND HORTICULTURE,

AND TO

RURAL AND DOMESTIC ECONOMY.

EDITED BY

JOHN J. THOMAS AND M. B. BATEHAM,

ASSISTED BY DAVID THOMAS AND OTHERS.

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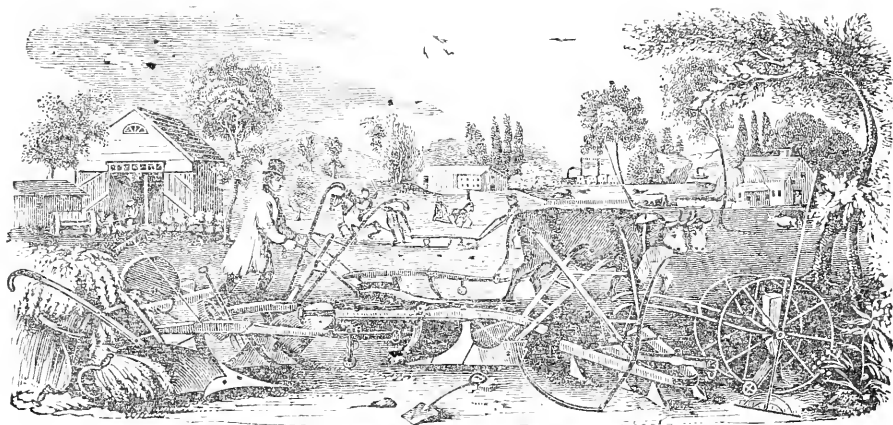
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Rochester, December, 1841.

M. B. BATEHAM.

THE NEW GENESEE FARMER

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"A Happy New Year."

To you all, readers! We intended writing a most *exquisite and extraordinary* "New Year's Address," to fill up this page of our paper; and in order that our fertile brain might produce something that would immortalize our names, we kept the matter concocting till the very day of publication, when, lo! on asking the printer how much space had been reserved for our Address, he told us *only twelve lines!* So, gentle readers, forgive the disappointment we have occasioned, and we will, with all sincerity, wish you a very "happy new year," and do all in our power to increase your happiness, so long as we may be permitted to make our monthly visits.

A New Year's Gift.

We print several thousand extra copies of this number of the Farmer, and send them as a New Year's present to our numerous *unknown* friends abroad.—We hope they will duly appreciate our kindness; and if they will "please read and circulate," so as to obtain a few subscribers thereby, we shall feel most abundantly rewarded and truly grateful.

Our Prospects.

We last month bade farewell to our subscribers for 1849, but felt strong assurance that we should soon renew our acquaintance. We are happy to say that appearances now indicate that our highest expectations will be more than realized. The names of our old friends, together with very many new ones, are now coming in with great rapidity. The success of the paper the past year, and the promptness with which the subscriptions are renewed, afford the strongest possible evidence that our labors are approved by the public, and encourage us to persevere with renewed energy.

Our most sincere thanks are due to the many Postmasters and other friends of agriculture, who have kindly assisted us. We hope they may have the happy consciousness of benefiting others besides ourselves.

Uncurrent Money.

Bills on solvent Banks in this, and the Eastern States, are at par with us. Canada, Pennsylvania, and New Jersey, are about 5 per cent discount.—Ohio, Indiana, Kentucky, and most Southern, money, is about 8 per cent; and Michigan and Illinois is 10 to 12 per cent.

We hope our friends at a distance will take pains to send us the best money they can obtain. We do not *refuse* any of the above, when sent us free of postage, and nothing deducted for commission; but the amount paid by us for discount during the year, is a serious item.

Subscribers in Canada.

Should remember that their Postmasters cannot frank letters further than the lines; so that we are compelled to pay postage on all letters coming by mail from there. This we do not mind, if bills not under \$1 are remitted; but on small bills, the postage and discount together, are too great a sacrifice.

Subscribers residing near the places mentioned below, may pay their subscriptions to the persons named.

Kingston—JOHN CRIGHTON, (Chron. & Gaz. Office), and CHARLES HEATH.

Port Hope—D. SMART, Post Master and President Agricultural Society.

Toronto—LESLIE & BROTHERS, JAMES F. WESTLAND, and GEORGE LESTIE.

Hamilton—SAMUEL KEER, Merchant.
London—JOHN NOVELL, (at News-Room.)

In addition to the above, Postmasters and friends of the cause generally, are requested to act as agents.

BATEHAM & CROSSMAN.

TO CORRESPONDENTS.—Several communications are unavoidably deferred. Our friends will greatly oblige us by writing earlier in the month.

☞ A certain correspondent is requested not to attempt to hoax us by sending articles as original which were published under the editorial hand of the old Genesee Farmer; nor parts of said articles slightly altered.

Circulate the Petitions!!

Let the farmers, and friends of Agriculture in the Empire State, exert themselves during the present month, and send to Albany such an expression of their wishes as cannot be disregarded. When the yomanry of the land *speak out* on any subject they are not to be trifled with. Let our Legislature remember that. ☞ See page 9.

For the New Genesee Farmer.

"Election is Over."

The strife of the contending parties has ceased.—And now, that the important question of "who shall be our servants?" is settled, it becomes an interesting consideration, "what shall those servants do on our behalf?"

We have heard much during the past year of the distress occasioned by "tinkering with the currency," of the disastrous results attending "odious monopolies," and "Bank aristocrats." The *poor people* have been greatly pined by either party, and much has been said by way of condolence; much by way of promise. There is reason enough for all this no doubt; we have felt enough, and heard enough, and read enough to satisfy us that our sufferings is intolerable.

But now, brother farmers, for fear that all these fine professions may not be quite kept in remembrance let us, in the most respectful manner possible, remind our friends at Albany, that our wants are not yet relieved; and that while we are very glad to see all other necessary objects attended to, we also believe an enlightened policy would require that much more attention should be given to the encouragement of agriculture, than has been for some years past.

Nothing is wanting to secure this desirable result but a general alacrity among farmers in circulating petitions, which it is important to remember should be transmitted to the Legislature at as early a day as possible.

ONE OF THE PEOPLE.

Clover in Orchards—Inquiry.

Messrs. EDITORS.—The opinion is quite prevalent among farmers, that Clover is injurious to orchards, but I cannot understand *why* it is so. If any of your correspondents can throw any light on the subject, it would greatly assist a subscriber.

SOUTH WEST.

Note.—The inquiry of South West should have been inserted some time since, but was accidentally mislaid.—Eus.

Meshauncks vs. Robans.

Messrs. EDITORS.—I have raised, the past season, thirty-six bushels of Meshaunck potatoes from eleven square rods of ground. If any of your readers have done better, with Robans, or any other kind, I should like to know it; and if I am beaten, I will try again next year.

Yours, &c.,

P. BRIGGS.

The Annual Meeting

of the Genesee Agricultural Society, occurs on Tuesday, the 2d day of February next. Business of great importance will then be transacted, and it is very desirable that there should be a full attendance. The Meeting will be held at the Arcade House, at 11 o'clock, A. M.

H. M. WARD, Sec'y.

Effects of the Stock on Grafted Fruit.

A late number of the *Yankee Farmer*, contains some remarks of the editor, relative to the influence of the stock on grafted fruit, copied from a former volume, in which he lays down the following propositions:

1. "Stocks have an effect as to bearing years.
2. Stocks affect the action in hastening or retarding the ripening of fruit.
3. Stocks produce defects on grafted fruit.
4. Stocks affect the color of fruit.
5. Stocks affect the quality of fruit.
6. Stocks have an influence in increasing or decreasing the size of fruit."

This subject is not new to horticulturists. An elaborate article by Dr. Menase of Philadelphia, affirming such influence was reviewed by us several years ago, in the 3d volume of the *Genesee Farmer*; but we did not think at the time, that the evidence was conclusive; and we have seen nothing since, to induce us to change that opinion. Still, we are willing to examine the subject anew with fairness and candor.

We should have been gratified if the editor had given in detail, the facts on which he founds those opinions; but as he has only done so in part, we would respectfully suggest that if these propositions are true, it would not be difficult to prove them by experiments faithfully recorded, from the commencement to the termination, and before witnesses of unexceptionable character. Statements of this kind would have a weight that solitary or imperfect recollections can never produce; and more especially where the observations are hastily taken, without a thorough examination of all the circumstances connected with the subject.

But we cannot properly omit on this occasion, the statement made by Professor Lindley, that "no such influence can be exercised." He adds: "Those who fancy that the Quince, for instance, communicates some of its austerity to the Pear, can scarcely have considered the question physiologically, or they would have seen that the whole of the food communicated from the albumen of the Quince to that of the Pear is in nearly the same state as when it entered the roots of the former. Whatever elaboration it undergoes, must necessarily take place in the foliage of the Pear; where, far from the influence of the Quince, secretions natural to the variety, go on with no more interruption than if the Quince formed no part of the system of the individual."

This decision is emphatic; and no far as we can perceive, the reasoning is as clear and conclusive as can be expected from theoretical considerations alone. If there are facts however, that come in conflict, their weight must be allowed, and the theory should then be revised and amended.

Bearing in alternate years is a habit chiefly observable among apple trees; for when the pear, the peach, the plum, and the quince fail to be regular bearers in this quarter, the deficiency is to be ascribed to unfavorable seasons, or the depredations of insects. The case is otherwise however, with some varieties of the apple; and we have supposed the habit was owing to the trees becoming through exhaustion, unable to produce blossom buds for the next season. In this indeed, we may be mistaken; but of two things we are confident; moderate bearers are commonly annual bearers; and those that we find unproductive, have generally borne profusely in the preceding season. As examples, we would name Yedder's pippins, and the Sweet Bough, or Harvest apple. The former is an alternate bearer; but the latter bears every year; and as we have half a dozen trees set on as many different seedlings, among which we have observed no variation in point of regularity, earliness or productiveness—

we feel at liberty to infer that these stocks have had no influence on the grafts.

But alternate bearers conform to circumstances in commencing their biennial course. We had six trees of a russet apple, all of the same variety, half of which bore abundantly at one time, and the other half in the following year. Now if alternate bearing is caused by excess in one season, and we prevent that excess by destroying a portion of the blossoms, we shall certainly prevent alternate bearing. How then can a stock subject to such conformity, induce a graft to alter its time of bearing? It appears to us, it cannot be.

There are some things in regard to the ripening of the same variety on different stocks however, that we are not prepared to explain. For instance, we have three trees of the Transparent Guigne cherry, one of which ripens a week or ten days before the others. The late trees stand near together—the other at the distance of sixty feet. The subsoil in that part of the fruit garden is very variable—small beds of sand in some places, and clay and stones in others; but we know not what the subsoil is under those trees. Neither do we know whether the stocks are all suckers of the Morello, or a part of Kentish* cherry. We may ascertain this next season. In the mean time we are quite as much disposed to ascribe the difference in the time of ripening, to the subsoil, as we are to the stocks.

It is well known however, that stocks have an influence on the ripening of wood, and tender sorts become harder when grafted on hardy stocks—not because the latter exert any specific influence on the former, but because the usual supplies of sap are withheld earlier in the season, and the wood has more time to mature. The same effect is produced when tender shrubs are planted in dry, sterile, rocky situations.

In examining appearances out of the usual order of things, great care is necessary to prevent us from drawing wrong inferences. When different trees derived from the same parent-variety, differ in their fruit, perhaps the first idea that occurs is a difference between the stocks, and the matter is settled too often we apprehend, without further examination. But let us not deceive ourselves. If the stock affects grafted fruit, its action must be regular, every year alike; for having neither leaves nor branches, it is less subject to vicissitude than any other part of the tree; and therefore no variation in the flavor, shape, or color of the fruit, can be justly ascribed to the stock, except it be regular and every year alike. If it is not so, we must search for some other cause; and even if it is so, there may be another cause. Several years ago, we had the Washington plum of a light but splendid red. The tree however, never produced fruit of that color either before or since. The cause therefore could not be in the stocks.

Again—we have three trees of the September pear (Summer Bon Cretien?) growing on pear stocks; and several branches of this fine variety on a Spitzenburgh apple tree. About nine years ago, the latter bore pears that were redder, and sourer, and more astringent, than the fruit from the other trees; and we fancied that the Spitzenburgh had imparted some of its qualities. The cause appeared very plain. Could it be in any thing but the stock? Yes—they never bore such fruit before or since; and the pears are as yellow, and as sweet, and as pleasant, as any that are produced by the other trees. The stock therefore could have had no agency in the matter.

We have two trees of the Summer Bell pear. For several years past, one has borne large fair fruit, chang-

*These two sorts as stocks, are well adapted to test this question.

ing from green to yellow as it ripens,—while the other tree has produced reddish pears, but so knotty, astringent, and unpalatable, that we have consigned them to the dogs; and year after year there was no improvement. Well, what stronger proof can be wanted that the stock affected the graft?—Not too fast. That tree has begun to bear better fruit; and we have no doubt its final recovery though the disease we can neither name nor describe.

The large White Current is a delicious fruit; and we have had some dozen or fifteen bushes planted a row, all from the same parent-variety, but about one half of them bear fruit very superior to the others—much sweeter and more juicy or melting; and even visitor who has tested them, concurs in this opinion. And they are regularly so, every year alike. Well is not this a clear proof of the effects of the stock on the graft?—No—they have no stocks—they stand on their own roots.

Culture of the Peach Tree.

It has been mentioned by writers on the culture of the peach tree, that hot water poured round the trunk at the surface of the ground, will destroy the worm. We have not yet tried it, but we intend to do so; and in the mean time we would suggest to our readers, that it may be done at any time during the winter or spring when there is no snow and the soil is unfrozen. We think the work would be more thoroughly done however, if the gum be first removed, so that the hot water may enter the habitation of this insect.

Sooth has been found excellent for this tree. In one case that has come to our knowledge, its pale leaves were changed into a dark green by this application round its roots; and though the effect may in part have been caused by the destruction of the worm, it has doubtless, acted also as a manure. Those who have stove pipes to clean and peach trees to cultivate, should save the soot for this purpose.

One of the most deplorable conditions that a peach tree can be placed in, is to stand in a meadow or grass ground which is annually mowed. Sometimes we see them in door-yards where the grass grows strong, but where neither pigs, nor sheep nor cattle, are allowed to enter. A halfstarved tree however, is no ornament in front of a house; but we will not find fault without proposing a remedy. Cultivate a circle round each tree, of two or three feet in diameter; and hoe in manure from the stable, the hog pen, the hen roost, the leach tub, or the wood pile, not forgetting the stove pipe, and the tree will soon compensate for the labor by its beauty and productiveness.

A Tariff for Revenue made to subserve Protection. The importance of encouraging the Culture and Manufacture of Silk.

MESSRS. EDITORS.—The assertion that Domestic Cottons have been cheapened instead of becoming dearer under a protective tariff, is proved by the present extreme low prices of the article. It is not my purpose, however, to advocate the same measure of high tariff for the protection of every other branch of American industry. The falling off of the revenue on imported cottons, as home production supplied their place, must now be made up by increased imports on other articles of foreign growth or production. Instead then of laying a duty on tea and coffee, as is suggested by the Editor of the N. Y. American, why not collect a revenue from such articles as can be produced in the United States? Tea and coffee, although luxuries, are the luxuries of the most precious of all classes in the United States—the independent, well paid, laboring classes. Besides this, tea is not now, as formerly, paid for exclusively in the precious metals; but in the way of trade, either indirectly through England, or directly with China. Neither

tea or coffee indigenous of the United States; and the latter article is always received in payment or exchange for articles of the growth and manufacture of the United States, to which is often added the commercial advantage on our part, of two freights and no profits. Such as these, are essentially the articles of free trade.

Without enumerating the articles on which an increased duty for revenue, might be levied to an extent sufficient to answer both purposes, namely, *revenue and protection*, I will now only advert to the article of Silk, both raw and manufactured; the more especially as the production of the raw material is introducing a new staple to the South, where the strongest position to the protective system is found; and here the over production of cotton at this time has placed ruinous low prices and extreme pecuniary embarrassment.

Almost coeval with our Constitution a bounty on fish has been paid by the government, to encourage the raising of wealth from the ocean. I do not say that the like stimulant should be given to encourage the cultivation of the waste places of the land.—The exhausted and abandoned tobacco lands of Virginia, and the extensive tracts covered with the large leaved cane in the Carolines.—But these lands are well adapted to the culture and growth of all the varieties of the silk mulberry, from the succulent, broad leaved, morua silvatica, to the more hardy alpine variety.

If imported silks, instead of being admitted into the United States as they now are, free from duty, could be subjected to a permanent impost, sufficient to encourage the silk culture and manufacture at home; and by the duties collected on those necessarily imported, until the domestic article supplies their place, we can calculate the advantages which will accrue to the social independence of the people by such a consummation.

To him who lives in a manufacturing village, belongs the faculty to see and feel the extended influence of its trade; the fruits of its industry, and the variety and extent of its consumption of the products rural labor.

One of the peculiarities (call it not an evil) growing out of the equality of our institutions, is that extravagance in dress which pervades the poorer classes in the United States. If this is an evil, it is indigenous to our moral and social atmosphere, and not to be adicated. It is one of those passions of the soul, without which industry, in the great mass, would be deprived of more than half its stimulus and aliment. Let our government then, by a wise and fostering policy, enable the people to produce that which they must have, but cannot pay for if purchased abroad.

S. W.

Dutch Dairies.

The Journal of the English Agricultural Society, contains a long and interesting account of the Holstein dairy system—of those splendid manufactories of the best butter in the world." Its length precludes as publication of the article in full, but a few prominent features may not be useless nor uninteresting to many of us, who, comparatively speaking, make butter without any order or rule. The Dutch carry on the business on a large scale, the larger dairies varying from 100 to 400 cows, and the churning is done by horse-power.

Good butter makers often differ in their modes of operation, but in one thing they always agree, and always will; that is, *cleanliness and purity*. The Dutch understand this, and attend to it most rigidly in the construction and management of their buildings. These are, a milk cellar, a butter cellar, a churning house, a cheese room, and a kitchen for washing all vessels, and cooking for those engaged in

the dairy work. The milk cellar is made to front the north, and is shaded by trees from the sun; and in choosing the site of the dairy, particular care is taken to place it beyond the reach of every thing calculated to generate bad odors, or in any way to taint the atmosphere. The floor is sometimes flagged, but is generally of brick, neatly fitted, so that no water may lodge in the joints, and slightly inclined, to facilitate mopping, "which is never omitted to be done twice a day, notwithstanding that every avoidable impurity is carefully guarded against, and every drop which may fall at the time of the milk being strained, is instantly wiped up." A great improvement has been lately made, by dividing the floor into compartments or squares by brick ledges 3 or 4 inches high. In these, the milk dishes stand, and they are filled twice a day with cold water, by means of a pump, a small sluice being at the lower extremity of each, for the escape of the water. This is of great value, preserving the milk much cooler in summer, and more completely effecting the separation of the cream. We would suggest the use of water-lime mortar in the construction of these squares, as being cheaper and better.

The milk cellar is sunk 3 or 4 feet in the ground, and is 16 or 18 feet high, the best having an arched roof of masonry, as being more conducive to coolness, and are furnished with two rows of windows on the north, east, and west side, to admit circulation of air. The lower row are lattice, with blinds, and gauze frames, to exclude insects; the upper glass, which can be exchanged for gauze when needed.

The building for the cheese room is entirely separated from the milk, butter, and churning cellars, and is placed as far as practicable from them, a tainted air affecting the quality of milk and butter, to a degree, which is, in general, little suspected.

The persons required to manage a large dairy, are, an overseer, a cooper, one or two cow herds, one or two swine herds, a head dairy woman, and dairy maids in the proportion of one to eighteen cows.—The overseer has the general charge of the cattle, of the swine, and calves, and sees that they are properly cared for, the cows milked clean, that every thing is in its place, and that every man does his duty. The head dairy woman must understand thoroughly the whole management of the dairy house;—she must observe accurately when the milk is to be skimmed; the degree of acidity it must attain before churning; the temperature during churning; and must attend to the operations of working, salting, and packing the butter. She must be punctiliously clean herself, and keep every one else so. In large establishments, she has full employment, and needs the assistance of one or two of the more experienced dairy maids. The dairy maids, besides milking their 18 cows, washing vessels, &c., work in the garden in summer, spin in winter, wash, bake, and cook. They rise at 3, and sometimes at 2, in summer, but are in this case allowed two hours sleep at mid-day. Girls in this country, we presume, would hardly be willing to work so hard.

Each dairy maid marks her own particular cows by a colored ribbon tied round their tails. They bring their milk from the field to the cellar, by a wagon, drawn by one horse, having long bars attached, in which iron hooks are inserted, and on these the pails, containing 30 or 40 quarts each, are hung so as to swing free of each other. The milk is effectually prevented from spilling, though they get many a rude jolt, by thin circular plates of wood, floating upon the surface.

The particular process of butter making is too valuable to be abridged, and we quote it entire.

"It has already been stated as a rule, that the

cream must be removed from the milk before any acidity is perceptible, if butter of first rate quality is looked for; and it has been found, by experience that a cellar temperature of from 60° to 62° Fahrenheit is the most favorable; a complete descent of the cream then taking place in 26 hours: whereas a great degree of warmth, though it quicken the separation, still more hastens the souting process, which operates injuriously not only on the quality but the quantity of butter. In a cold temperature, the separation is effected much more slowly, so that 48 or even 60 hours may be required; this, however, is the longest period that may be accorded without incurring the risk of imparting a rank, unpleasant flavor to the butter, which even if not perceptible on its being first churned, manifests itself very shortly afterwards.

"The commencement of acidity in milk, is indicated by a very slight wrinkling of the cream, and a scarcely perceptible acid taste. So soon as these signs appear, the work of skimming must begin, and though the milk have only stood 24 hours; and the cream is poured through a hair sieve (which is kept for this purpose, and must never be used to strain up the new milk with) into large barrels, containing about 240 quarts each (usually sufficient for one churning) in which it remains till the necessary sourness is attained, which in summer follows in 24, in winter seldom under 36 or 48 hours; unless when the small quantity of milk admits of its being partly strained at once into the cream barrel, and the remainder added without skimming from the milk pans when cool.—This method, undoubtedly, is as all get on, the greatest return of butter; but as is generally believed, not of so rich a quality as that produced from cream alone; and, moreover, in a large dairy, during the time the cows are in full milk, would occasion much additional trouble, an almost endless churning, and a total prevention of cheese making. The cream having attained its requisite acidity, during the advance to which it must be frequently stirred with a small churn staff to prevent it conglobing, technically called becoming cheesy, the next object of the dairy-woman's skill is, the degree of warmth or coolness which must be imparted to secure good butter. In warm weather the churn is rinsed with the coldest procurable water, in which a piece of pure ice is often thrown, and sometimes, though more rarely, cold spring water is added to the cream about to be churned, which operation is then always performed either very early in the morning or late in the evening. In cold weather, on the contrary, warm water is applied, both to rinsing the churn and to the cream itself. The churning being completed, the butter is taken off by means of a large wooden ladle, and carried in a tub directly to the butter cellar, where, in a large trough, hollowed out of the trunk of a beech or oak, very smoothly polished off inside, and provided with a plug hole at the lower extremity, (the women who churn milk is slightly worked, and salted with the purest salt, then moulded with a wooden ladle into a mass at the upper end of the trough, and left for some hours to soak and drain. In the evening it is thoroughly kneaded and beat, or rather stamped, the dairy maid repeatedly lifting a piece of 3 to 4 pounds, and slapping it with force against the trough, so as to beat out all the milky particles; and this, lump after lump being freed from extraneous matter, the whole mass is spread out, receives its full proportion of salt in all about 1½ oz. per pound, which is worked with the utmost care equally through it, and again moulded into a compact mass. The women who churn milk are seldom if ever washed, and water is believed not only to rob it of its richness and flavor, but as being itself susceptible of putrefaction, to be equally inimical as milk, to its preservation. When a sufficient quantity is ready to fill a cask, the several churnings are once more kneaded through, a very little fresh salt added and packed into the barrel, which is made of red beech wood, water tight, and previously carefully washed and rubbed inside with salt. Much attention is paid that no interstice shall remain either between the layers of butter or the sides of the cask. A cask is never begun to be filled until it can be completed, as thus alone the butter can be exactly of the same flavor and color, which is probable one reason why small dairies, whatever management, never produce such good butter as large ones, as the small churnings must remain long exposed to the air, until the requisite quantity is in readiness.

The qualities of first rate butter are considered to be, 1st, a fine, even yellow color, neither pale nor orange tinted; 2d, a close, waxy texture, in which extremely minute and perfectly transparent heads of brine are perceptible; but if these drops be either large

or in the slightest degree tinged with milk color, it indicates an imperfect working of the butter; while an entirely dry, watery appearance, is equally disapproved; 3d, a fresh fragrant perfume, and a sweet kindly taste; 4th, good butter will, above all, be distinguished by keeping for a considerable time, without appearing an old or rancid flavor."

Two Good Farmers.—

Not too good farmers—for those that are merely good, are almost as rare as white blackbirds. When we say "good," we do not mean what is commonly understood,—in lustrous, money-making men,—but who perhaps apply a large portion of their labor to very bad advantage; but those whose whole course, in all its departments, is such as accurate and repeated experiments have proved to be adapted to the soil and climate; which not only affords the greatest profit each year, but is constantly improving instead of exhausting the land.

These two specimens are given in the late report of the Farm Committee of the Hartford County Agricultural Society, published in the New England Farmer. The first is that of John B. Davis, of Derby, whose farm consists of seventy-five acres, and from which the following very respectable average annual receipts are derived.

Apples and Cider,.....	\$509
Hay,.....	200
Potatoes,.....	100
Pork,.....	80
Straw,.....	75
Grain,.....	75
Wool,.....	25

Two men labor on the farm the year through, with occasional additional help, but no precise account of the amount expended, was rendered.

It will be seen that the orchard is the most profitable, the trees being kept in the finest condition, to which frequent tillage doubtless contributes. *Two hundred dollars* were received last year (1838) for *winter apples* of the choicest varieties, and thirty dollars for cider sold, in about thirty barrels kept for what purpose? and apples fed to hogs, cattle, and horses. All the farm, except the woodland, has been subjected to the plough, although hay is the chief object aimed at in cultivation. Only small portions of the land are tilled, on which the cultivated grasses have become luxuriant. The routine of crops adopted is, 1st, corn on sward with manure; 2d, potatoes with manure (sometimes followed by turnips); 3d, rye or oats or grass seed. For the corn, (which is Dutton and White Flint,) twenty double loads of manure are spread on the grass before ploughing, and afterwards holes dug at each hill in which a small handful of plaster and ashes is dropped and mixed with the soil at planting. The average crop is seventy bushels an acre. The potatoes are planted with equal manuring, and yield two hundred bushels. The rye yields twenty-five, and the oats seventy bushels, and a half bushels of the latter being sown to the acre, which is ploughed in, harrowed, and the grass seed covered with a bush.

About twenty acres are kept in meadow, which contain in grass from six to eight years, and the average crop is estimated at two and a half tons to the acre.

Of manure, seventy-five loads are made yearly, and fifty prebaked; one ton of plaster, half a ton of shell lime, (which is added, as indispensable, to the compost,) and fifty bushels of ashes are also used.

The stock consists of two yoke of oxen, two milch cows, seven hogs, thirty-five Bakewell sheep, and one horse.

The other farm, is that of Wm. K. Townsend, of East Haven, on New Haven harbor, and consists of 43 acres of salt grass, and 118 acres of upland. The report of this farm, by the committee, we have read

with great satisfaction, and, did our limits admit, we should be glad to give it entire. Such a report, more matters of fact than it is, is more calculated to inspire a taste for farming, than all the fine declamation and eloquent reasoning we ever heard or read. As it is, we must content ourselves with a statement of some of the most interesting facts.

The buildings are arranged with a strict regard to convenience, being erected "after approved models, and they show conclusively that much labor may be saved by judicious arrangements, with but trifling additional expense. For each implement of husbandry, a special and convenient place of deposit is also provided." The fences throughout are good. The soil is sandy and gravelly loam, naturally light and thin, and left in wretched condition by its former occupant. Successive portions have been reclaimed from this condition, by careful and thorough tillage, collecting the stones into strong and durable fences, and applying a heavy coating of manure. With the exception of two fields, which have not thus been reached in the regular order, the farm has been greatly improved. "After such improvement, however," say the committee, "these lands are not, as is so often the case, again reduced to their former condition, or rendered still less productive, by injudicious and excessive croppings, without any return to the soil; but they thus submit careful treatment, as every good farmer ought to give his land, if he is kept constantly improving."

The corn crop, by measurement, has averaged seventy bushels the acre; potatoes, two hundred and fifty bushels; rye, twenty-five bushels; oats, (early raised,) forty-five bushels; and barley, thirty-two bushels. Great crops of pumpkins are also obtained, by planting in large mounded hills ten feet apart each way, six or eight seeds, the two most vigorous shoots being allowed to remain.

Three hundred double loads of manure are annually made on the farm, which more than fifty are from the hog-pen. It is always applied unfermented, except to meadows and root crops, where compost is used. Three-fourths of a ton of plaster are yearly spread upon the meadows and pastures, and fifty bushels of shell lime applied to the compost heap.

Great profit has been derived from the breeding of improved stock, consisting of Durham cattle, "Tim Rind" hogs, and Bakewell sheep. The use of the revolving horse-rake in securing hay, of the cutting box for feeding stock, and of stables for cattle in winter, has effected a great saving.

Accurate and regular accounts of all operations are constantly kept, from which the following statement is taken of cash received the past year, *over and above the consumption of a large family*:—

Fruit,.....	\$ 200
Vegetables,.....	50
Went-back,.....	1,340
Hogs and pigs,.....	555
Wool,.....	50
Milk, butter, and calves,.....	2,143
Rent of stock,.....	50
Gross income in 1839,.....	4,388
Deduct cash paid for labor and feed of cows,.....	1,452
Nett income in 1839,.....	\$2,936

The great profit thus secured, appears to have resulted from the establishment of a well digested system of farming, faithfully and energetically carried out, and from the guiding of all the operations by constant and accurate accounts.

Improving Sandy Land.

Mrs. S. E. HARRIS—I find that your paper affords a valuable medium, through which we, who are young

or inexperienced, can obtain information. I the fore wish to ask one or two questions.

My farm is situated on the oak openings of Monticounty. The soil is what may be called a light, sandy loam—some parts nearly pure sand. One side borders on a flat marsh, part of which, to a considerable depth, consists of very black earth, which I suppose to be very valuable mould, formed probably by the decay of leaves and wild grass, which latter grows very abundant all over the marsh.

Now, I wish to inquire whether this black earth will make a dressing for the upland, of sufficient value to defray the expense of carting it on; and if so, how and when is it best to apply it?

I also want to ask what kind of a fence can best be made across the above mentioned marsh, where timber is very scarce, and money little.

A YOUNG FARMER.

December, 1840.

Hoven Cattle.

Mrs. S. E. HARRIS—The cure for this complaint which you copied from the Farmers' Cabinet, written in slight cases, prove effectual; but in severe cases resort must be had to other methods.

The contrivance of Dr. Morris, of England, first published in 1793, is the most effectual, and may be known to all of your readers. It consists of a flexible tube, made of wire, covered with soft leather. Dr. M. found that the distance from the fore teeth to the first stomach of a large ox is six feet; therefore the tube should be a little more than that length. On this being thrust down the animal's throat, so as to enter the first stomach, a large quantity of fanned air, if well discharged, and instant relief afforded.

If this instrument is not at hand, recourse must be had to tapping. Take a sharp pen-knife and introduce it into the paunch, between the hook bone and the last rib on the left side. To assist the escape of the gas, a quill, or small tube, may be introduced in the orifice. As soon as it ceases to escape, a little plaster should be applied upon the place; and, if all done with care, but little injury will result from the operation.

The following cordial may afterwards be given with advantage:—Take 2 ounces of Anise seed, 2 ounces of Licorice, in powder; 2 ounces tincture of Rhubarb, and one ounce of spirits of nitre. Mix and give in a quart of warm gruel.

Respectfully yours,
AN ENGLISH EMIGRANT.

Near Albion, Orleans co.

For the New Genesee Farmer.

Curing Hams.

What! another method? Yes, we answer, and request the incredulous to try it before they condemn. On the day, or day before, killing your hogs, seal your tubs (a pine tub is preferable,) and turn it over another fire of corn cobs or maple chips. If the process is skillfully done, it will thoroughly infuse the smoke into the wood. Let the tub be wet or moist when smoking.

When your hams are perfectly cold, sprinkle the bottom of the tub with salt, and pack in the usual manner, with little or no salt. Cover upon the ham a pickle (perfectly cold) sufficient to cover them. To six gallons of water add six pounds salt and one fourth pound salt petre. This completes the whole process of curing; and your hams for winter and spring use are much better than when cured and smoked in the old way. The process of keeping hams in a tight and over heated smoke house, is the great cause of their premature decay.

If the hams are to be kept during the next summer, the brine must be changed and more salt added. If

For the New Genesee Farmer.

To the Farmers of Niagara County.

Purely from the desire that agricultural knowledge be disseminated, and our husbandry thereby rendered more prosperous, intelligent, and respectable, I address you a few thoughts, through the columns of this paper. I am well aware, however, that I am no means the proper man to perform this task successfully; for I acknowledge myself but a child in practical agriculture; a farmer of only eight years experience, while many of you have devoted a whole life is far to the pursuit of husbandry. I know my ignorance, I am deeply sensible of my destitution of agricultural science, and, indeed, I am no less deeply alarmed of it. Nevertheless, I have felt towards this department of business an ardent attachment, as also towards the farming community, for these many years, and if there is about me anything of the nature of pride, it is not of the manner in which I pursue it, but the calling in which I am engaged.

There is to me a substantial pleasure in agricultural pursuit: a satisfaction, peace of mind, a tendency to contentment, freedom from vexations, and an income, which leads a man into close intercourse with Nature, which is no where else to be found in any other avocation. It is a calling, the cultivated and useful pursuit of which gives more substantial independence, more dignity, more stability of character, and generally a greater competence than any other. It is a fact, not to be controverted, that agriculture, in a broad sense in which I would use the term, is the foundation and support of all others. Would a statue on the removal of the pedestal? So surely would commerce, mechanics and manufactures, were they without the support of agriculture. She is the only source of material wealth, and therefore every other art and profession is, either directly or indirectly, dependent upon her, and they can advance but a step without her.

But it will readily be conceded, that the peculiar advantages and qualities which are set before the farmer, and which for the most part are attainable by him, are possessed only by a comparatively few. And why? Is it not for the want of agricultural science and intelligence? If this be the fact, ought we not to use up all the means within our reach to receive it?

And how can this be done more surely, more effectually, or more cheaply, than by the general circulation of agricultural papers? There can be no question that very great advantages are derivable from this source. Some of you, I know, will accede to this sentiment; for, not long ago, a respectable and an obliging farmer, whose residence is not five miles from town, said to me, that merely in passing through the country he could tell whether a farmer was in the habit of reading agricultural journals; by the general circulation of his farm, fences, buildings, stocks, &c. I again, I heard a farmer say, not long since, (a thorough going business man he was too), that wished there was not an agricultural paper to be read, for by their influence the crops were so superabundant as to ruin the market. And besides; it was estimate of the late Judge Bud, that every additional subscriber to such journals, increased the annual product of the soil at least ten dollars. So that five hundred thousand new patrons (only the farmers of New York and Ohio) would add five millions of dollars to our agricultural productions.

On the same calculation, suppose the twenty-five added farmers in our county, who are without an agricultural paper, were all to become subscribers, at commencement of the new year, a net profit would be added to their annual income of more than thirty-three thousand dollars. And I have no doubt

the amount of happiness, and mental entertainment would be ten fold greater than that.

A paper, like the New Genesee Farmer, at fifty cents a year, (less than one cent per week) is so low that none can find an excuse for not taking it. We do not consider our true interests, when we neglect to take so valuable works at so small an expense; at least from my own experience I do not so judge. I refer particularly to the New Genesee Farmer, in preference to other papers of the kind, for the reasons that it is, in my estimation, an ably conducted journal; that it is offered at so very low a price; that it is published in our own neighborhood; that it is acquainted with our own soil and climate, and it is better adapted to the agriculture of Western New York than any other. And if we who are in the habit of reading such journals, would induce one-half of our brethren of the plough to become subscribers, I have no hesitation in the opinion, that more than twenty times the cost of the paper would be their advantage. SHALL WE TRY?

Yours respectfully,

Thorn Hill, Dec. 1-1840.

W. PARSONS.

Hints about Common Schools.

Pursuant to our promise for devoting a portion of our paper, regularly, to the promotion of Education, we now insert some paragraphs from a liberal reference to *Common Schools*. Elsewhere, in our columns, there will be found some articles of a general character respecting the advantages of education.

TEACHING OF SCHOOLS.

Much as we fear of the difficulty of procuring good school teachers, we believe that an ample sufficiency of well-qualified instructors may be had at all times. If proper encouragement be offered to those who labor faithfully in our schools.

Offer rain wages, and treat with proven respect the person when you engage to discipline the "immortal minds" of the rising generation around you. Such a course would command for our schools much of the talent usually devoted to other pursuits—pursuits which generally at present offer pleasant and more profitable inducements for the exertion of such talents and qualifications as are necessary to constitute a good teacher. "Supply" would readily follow the "demand" in this, as in the legal and medical professions, and in other pursuits, if the inducements were—as they ought to be—REMEMBERED EQUALLY STRONG.

ARE YOU A PARENT?

If you are, the love which you bear your children should stimulate you to cast a friendly eye towards the school-house where the children of your neighbors are instructed along with your own. Your presence occasionally in the school-room, with a few remarks from you, showing your respect for the teacher and your solicitude for the welfare of the scholars, would promote the progress of the school far more than the money which you pay in taxes for its support.

DUTIES OF TRUSTEES, ETC.

Were our Common Schools regularly visited by even one in a hundred of the persons who profess the most zealous regard for the rights and welfare of the people, a spirit of emulation would be incited that would soon benefit teachers and scholars in a manner that would shed incalculable blessings on the population of the State.

Even of the Trustees of Schools—the men elected specially to promote the welfare of the system of Public Instruction—there are thousands in the State who scarcely enter the school-house for any purpose during the year. How can any honest man satisfy his conscience for such criminal disregard of the solemn duties devolved upon him as a Trustee for promoting the spread of knowledge and morality among the youth committed to his charge?

Genesee County Agricultural Society's Exhibition and Fair.

Held at ALEXANDRIA, N. Y., 11, 1840.

The First Annual Exhibition and Fair of the Society was very numerous by attended and the competition spirited, considering the time it had been in operation. The Society was not known until after the middle of July, and it had become so late in the season that there could be but little competition except in animals, and of these there was a fair show.

The premium for the best short-horned Durham bull was awarded to Mr. B. Munroe, of Le Roy; and he well deserved it for it was a very fine animal.

The premium for the best Devonshire bull was awarded to Mr. Vernon of Le Roy. On his imported bull.

The best Durham bull calf was adjudged to L. E. Heston of Batavia. The calf was from the herd of P. A. Remond, Esq., of Alexandria.

Mr. Heston also drew the premium on the best yearling steers.

Mr. Beck, of Sheldon, who exhibited a fine herd of Devonshire, drew premiums for best bull calf, best yearling bull, best cow, and best three year old steers, all Devonshire. Mr. B. sold several of his animals on the ground for very fair prices.

P. A. Remond, Esq., drew the premium on the best short-horned Durham cow.

To Mr. S. Allen was awarded the premium for the best sheep, wethers.

Mr. A. Toney of Alexandria, received the premium for the best yearling of oxen; and Mr. C. Dickson the second best.

Mr. Samuel Heston of Batavia, received the premium for the best four year old steers, and the second best yearling steers.

There being but little competition in horses, Mr. J. Hammond received the premium for the best breeding mare, and Mr. Ward of Le Roy, the premium for the best span of working mares.

There was a very fair exhibition of Swine. Mr. J. S. Harmon of Darien, received the premium for best boar and sow and pigs; all Berkshire. Mr. O. T. Farg, the premium for second best boar; Essex half black.

In Sheep there was a fine competition. Best half, for wool, was awarded to Mr. L. E. Heston, of Batavia, and as such, for lambs, to Mr. J. Heston, of the same place, for South Down. Gen. Stanton of Middlebury, had the premium for the best pen for three or more ewes.

In Field Products there was but little competition. The best acre of Winter wheat was awarded to Mr. Lewis Clark of Darien; product 60 bushels 10 lbs. Best acre of Spring wheat to Mr. H. Brinard of Alexandria; product 36 bushels 1 qt. Also the best acre of corn; product 82 bushels 5 qts. Best acre of potatoes to Mr. A. R. Taylor; product 460 bushels.

In the Domestic Arts, there was of necessity but little competition; the most in silk, however. There were some fine specimens shown of silk in various stages of manufacture, from the Cocoon to very fine reeled.

The premium for best 10 pounds of Cocoons was awarded to Col. S. Doolittle of Batavia. Best specimen of reeled silk to Mr. Hay of Le Roy.

Mr. L. E. Heston received the premium for the best piece of domestic flannel. Mrs. J. Heston of Batavia, received the premium for the best 25 lbs. of butter. Mrs. E. Bishop of Attica, the premium for the best cheese.

Decorative premiums were awarded to Mrs. E. Bishop of Attica, for specimens of linen in thread, stockings and unline, and they were very fine indeed. Mrs. Hendrick of Bethany, for specimens of silk and stockings. Also to Mr. Churchill and Mr. Duncan for specimens of filled cloth.

Mr. L. E. Heston, Mr. J. Heston, Mr. Vernon, Mr. Beck, Mr. Remond, Mr. Hammond, Mr. Clark and Mr. Bishop, donated their premiums to the Society.

An address was delivered by the President, and the following persons elected officers for the ensuing year:—

THOMAS C. PETERS, Esq., of Darien, President, Gen. P. Stanton, Middlebury, E. Bishop, of Attica, E. J. Fishburne of Edin, Thammes Lewis of Geneseeville, Daniel M. Ward, of Perry, Holland Esq., of Fennelton, P. P. Pond, of Batavia, Jesse W. Duggell, of Le Roy, Vice Presidents.

C. P. Turner of Batavia, Secretary. Thomas Bidle of Batavia, Corresponding Secretary, Lewis L. Heston of Batavia, Treasurer, And a Manager for the town.

Respectfully yours,

T. C. PETERS.

My Summer Crops.

MESSRS. EDITORS.—According to my promise, I now send you an account of some of my crops of the past season. My object in thus exhibiting my farming operations to the public, is not that I think them extraordinary, but that I consider it the duty of each member of society to do that, as an example, which he would have others also do. Knowledge, by communication, becomes common property. The plan of comparing thoughts and notes, leads to correction of errors and adoption of truth; and also enables us, by taking advantage of the experience of others, to avoid many things which it would otherwise require our own experience to convince us as being fallacious; by which we also avoid not only loss from failure, but also that vexation of mind, which is the attendant of loss. And for this reason, we should tell "*the truth, the whole truth, and nothing but the truth.*" All important truths, whether of failure or of success, in the operations of the farm, should be given to the public, that they may become known to all.

ROBAM POTATOES.

These I planted on the 2d of May, on a clover sod, without manure. The amount of seed was about three quarts short of three bushels of whole potatoes, cut into pieces of one or two eyes, and spread over three-fourths of an acre of land. The rows were four feet apart, and the cuttings were placed sixteen inches distance in the rows. The manner of planting, was to make the holes from two to three inches deep by the corner of a hoe, which can be done about as fast as a man can walk, with one stroke of the hoe; a child to follow and drop the cuttings, one in a place; and a boy to cover up, level, with loose earth. I planted thus shallow, in consequence of having about lost a crop of potatoes last year, on rich land, by having planted deep, as I had been advised by a brother farmer. When the potatoes were about six inches high, they were weeded with cultivator and hoe; then plastered, and on the 15th of June they were capaciously hilled, as the distance between the rows allowed. No more labor was bestowed upon them till they were dug in the last of October, when they yielded me two hundred and twenty-eight bushels; equal to an increase of seventy-eight fold.

I have used these potatoes in my family, and pronounce them equal to the best for the table: they are dry, mealy, and well flavored.

With regard to the value of these potatoes, they are superior to other varieties, inasmuch as far less seed is required; there are fewer small potatoes; they can be planted with about half the labor; owing to their size and to their growing in a cluater close to the foot of the stalk, they can be dug with much less labor; and in no respect do they yield to any others in point of intrinsic excellence.

INDIAN CORN.

I had two pieces of corn:—the first, two acres and seven-eighths, was clover sod, on which I drew eighty loads of long manure, and ploughed under. The seed, the red blue variety, after soaking twenty-four hours in soap suds, and being rolled in plaster, was put into the ground on the 20th of May. The rows were three and a half feet apart each way. During the season, plastered once, and went through with the cultivator twice each way, followed each time with the hoe. About the middle of September, cut up the corn at the roots, carted it off the field, and stacked it for ripening, and at the husking got four hundred and sixteen bushels of ears, which yielded on shelling, thirty-five quarts of corn from two bushels of ears; making two hundred and twenty-seven and a half bushels of corn; equal to seventy-nine bushels and six quarts per acre. The other piece, two and a quarter acres, was of the same character, equal-

ly good, clover sod, as the other, but was not manured. It was ploughed and planted six days later; the seed was of the same kind, prepared in the same way; but owing to the ground having become quite dry, at least one-third of the seed failed, which would not have been the case had it not been sown. The after-culture was the same as that of the first field, and the yield was forty-seven bushels per acre.

FIELD PEAS.

The latter part of April, I put in two and a half acres of Gold Vine Peas, (having obtained the seed at Mr. Batchan's Seed Store,) from which I harvested sixty-three bushels; equal to twenty-five bushels per acre. The land was neither good nor bad, but indifferent. Adjoining, in the same field, and at the same time, I sowed two acres to Marrowfat Peas, from which I harvested thirty-two bushels, or sixteen to the acre. Many of the vines of the Marrowfat became mildewed, and were consequently barren; whereas the Gold Vines remained perfectly bright through the summer, and every vine was prolific; many bearing from eight to sixteen pods.

Owing to the superior excellence of the Gold Vine Peas, and their scarcity, I have reserved the crop for seed; which I unhesitatingly recommend, and offer to my bretheren of the plough for six shillings per bushel.

SPRING WHEAT.

The Italian and Siberian varieties were very badly shrunk.

HALF BLOOD DURHAM CALF, OSIRIS,

Was dropped April 26th. At three and a half months old he weighed 380 lbs; at five months old he weighed 470 lbs; and to-day, Nov. 25th, at seven months old, he weighs 650 lbs. And this is a "skim milk calf;" taken from the cow at a week old; fed on new milk two weeks more; from that time till the first of Nov. fed on sour skim milk and hasty-pudding, and from that time to the present, on boiled potatoes and hay.

Now, Gentlemen, I have done my duty to myself and to my brother farmers; I have told them what I have done, and now I wish they would reciprocate the favor; and if they can tell a greater story than I have, I will attempt another year to be even with them.

Very respectfully yours,

EDWARD WILBUR.

Pittsford, Nov. 26, 1840.

REMARKS.—In behalf of our numerous readers, we tender Mr. Wilbur many thanks for the foregoing communication. One page of such statements, containing the results of actual experience, is worth more, in our estimation, than a whole volume of theorizing speculations. We unite with Mr. W. in the desire that many of our readers will reciprocate the favor, and send us accounts of their farming operations, whether successful or otherwise, during the past season.—Eds.

Biddle's Address.

Editors of New Genesee Farmer:

GENTLEMEN—I have read with much edification, the address delivered before the Philadelphia Agricultural Society, by NICHOLAS BIDDLE, Esq.; and I sincerely believe you would confer a favor on many of your readers by giving it a place in your columns.

Yours sincerely,

A LOCKPORT FRIEND.

REMARKS.—The address alluded to, is indeed a most excellent one; and we should be glad to publish it entire, would our space permit, and were it not for the circumstance that many of our readers dislike long articles. As it is, we select the most interesting and important portions, and omit those of a more local character. We have no doubt that most who read the following, will wish we had published the whole.

After congratulating the society on their exhibit and what they had accomplished—the aid received from Government, and the bright prospects before them; and alluding to the numerous advantages possessed by the farmers of Pennsylvania, the eloquent speaker proceeds thus:—

"Having thus spoken of the advantages which enjoy, I proceed to the less agreeable but more profitable inquiry, why our farms are not so productive they ought to be—and I make the comparison between Pennsylvania and England, because I think England, on the whole, the best farming country in Europe; and our English friends must understand that while we amuse ourselves occasionally with some of their peculiarities, we pay them the highest compliment we can, by proposing them as the models of our farming. Now why is it, that with the natural advantages in our favor, the English farmers beat us? I will tell you what I think of it.

"In the first place, we do not do justice to our profession. Farming is not liked, either among the young people, because it is considered a low exercise from gentry—or among the calculating, because it is thought unproductive. This last is, I think, a total misapprehension; and as I regard it correct essential to our success, I venture to say that farming ought to be more profitable in Pennsylvania than in England. The common notion is, that the high price of labor in Pennsylvania, makes farming unproductive and the opinion is repeated without examination, that the farmer is generally better off. Now the productiveness of farming, like the productiveness of every other occupation, depends on the expense of raising an article and the price you can get for it when it is raised. These expenses are the rent for the land, the tax on the manure, the prices of laboring cattle, of labor implements, and of laboring men.

"The land which can be rented in America for three or four dollars, could not be rented in England for ten or twelve dollars an acre—so that already the land itself costs three or four times as much. When we have got possession of the land, the tax-gatherer and the man soon make their appearance, and take the farmer fifty three per cent. on his rent. There are no duties, no taxes, no tax on the immediate vicinity of the city improvements, would scarcely one-tenth of the English tax—so that while on an English farm of two hundred acres, the rent and charges would be about \$3,

The same rent and charges would here be \$2,

Making at once a difference of \$2. Next, all manures are cheaper in Pennsylvania than in England, and rendered more cheap by the facilities of transportation.

Laboring horses are about one-fourth cheaper in Pennsylvania; and, moreover, the work which horses do in England, is generally done here by cows, too, are much cheaper here.

"Laboring implements are cheaper and better, wood being so much lower-priced and durable. All these elements of work, there remains only the laborer who is cheaper in England; they are cheaper by about 30 to 35 per cent.; but even say that wages are 50 per cent. higher in Pennsylvania than in England. But then, although the nominal rate of wages is higher, yet you actually get more work for the money. The climate gives you more working days than can be relied upon in the climate of England, where out door work is necessarily suspended, and the American laborer works better for the very reason that he is paid better. And proof, which seems decisive, is that although our wages are higher here, piece-work, contract work, whether it be to dig a canal or to reap a field, is done cheaper in America. And, accordingly, one of our most intelligent Philadelphia county farmers, Mr. Wall, always declared that his farm-work was done twenty per cent. cheaper in Pennsylvania than in England. But supposing it to be higher—labor is only one of the elements—for we have seen that the rents are three-fourths as high—as taxes—on times as high—as manure implements, cattle, all deer—and far overbalance any difference of wages were it even real.

"Let us now see what are the prices obtained when it is raised. What is higher in England—markets are higher. But what forms only one-fourth of the crop—and, on the other hand, the great staple of wool, is dearer here—potatoes are twice or three times higher—and, therefore, the English compete with us in our own market—turnips, cabbages, all vegetables, generally dearer; so that, after all, taking the average, farm produce is not higher, or very little higher, than in England.

gher, in England, while all the materials of raising are much higher there—so that, on the whole, our labor ought to be as lucrative in Pennsylvania as England.

"With regard to wages, it may sound strangely, but I believe it to be true, that the real interest of all farmers is, that wages should be high, and for this reason. A laboring man is not a mere machine—a human poor-body, into whose mouth is put a daily number of cents never to re-appear, but a living being with wants and desires, which he will not fail to gratify if the amount he possesses the means. If he can earn only a scanty pittance, just enough to keep him alive, he halves on accordingly—his food, bread and meat, a stultified, half-clad, wholly untaught animal, with a useless mouthful of carnivorous teeth. But if wages are high, he instantly employs them in comforts: in clothes for himself and family; and as he rises in the scale, ventures on the taste of meat. He employs a tailor—a shoemaker—a hatter—a butcher—and these in turn, purchase the materials of their trade from the farmer himself. The laborer becomes as a customer of him; if, and the buyer of other necessities—and the farmer receives back, with abundant interest, the difference which he advances in the great instance between high wages and low wages. It is for this reason that one of our shrewdest farmers used to say, yes, give our laborers good wages, and they will buy our beef. Thus, too, the bounties of providence go around, a beneficent circle—and, after making the laborer better fed, better clad, better taught—in short a better man, the farmer himself is richer for the very benefits he dispenses. Depend upon it, there is no surer sign of national prosperity than high wages—and God grant that for many a coming year it may be the lot of our countrymen who persist by the labor of their hands, to work well—to be paid well—and to live well.

"And now we come to the reason why our crops do not equal those of England. It is, that our farmers are too large—too large for the means we employ in raising them. Agriculture is the only pursuit I know, where the owner does not employ his capital in his business. He rents or buys a large farm, and then has nothing left to stock it with. He might as well rent a large store without goods enough to fill a single corner of it. In England, it is supposed necessary, before renting land, that the tenant should have a working capital, of thirty or forty dollars an acre, to employ. It is calculated that, besides the other enriching substances, the cost of the mere initial manures applied to the soil of England, amounts to three hundred millions of dollars; being more than the value of the whole of its foreign commerce. Yet the grateful soil yields back with interest, that is thus lavished upon it. And so it would do here, if we would only trust the earth with any portion of our capital. But this we rarely do. A farmer who has made any money spends it not in his business, but in some other occupation. He buys more and when he ought to buy more manure; or he puts it in his money in some joint stock company, to convert it into moonshine; or else he buys shares in the gold mine or lead mine. Rely upon it, our rich man is the barn-yard, and that whatever temptations stocks or shares may offer, the best investment for a farmer is *live stock and ploughshares*.

"Another thing which we should strive to amend, is a unwholesome and slovenly appearance of our fields. Clean cultivation is like personal neatness to an individual, a great attraction to a farm; but who can see without mortification, our fields of Indian corn and potatoes, just as their crops are about to be reaped, and stifled by a rival crop of weeds which seem sitting with impatience for the removal of the real crops, when they and all their seed may take exclusive possession of the ground. The rule of farming should be, never to let any thing grow in our field which we did not put there; and the value as well as the beauty of the crop would more than pay the expense of removing these noxious intruders.

"Nor do we pay sufficient attention to our gardens. We are too often content with a small enclosure where few peas and beans and a little salad are left to struggle with a gigantic family of weeds, not to speak of the frequent invasions from the pigs; and what can be saved comes at last on our table the scanty companions of the masses of animal food which form almost our exclusive subsistence. For such a wilderness, how easy would it be to substitute the cheap and nutritious variety of many vegetables which would grow without the least trouble, and while they gave variety to our tables, would diminish our excessive and expensive use of animal food.

The same want of neatness pervades the exterior of our dwellings. We look in vain for the green grass, the nice border, the roses, the climbing vines, and all the luxuriance of our native wild flowers. These cheap and easy works—which seem trifles—make up a great mass of employment; they are the innocent occupation of the young members of the family—the elegant luxury of them all; and they impress even a passing stranger with a sense of the taste and care of the farmer.

"In fruits, too, we are deficient. Our climate invites us to plant; and there is scarcely a single fruit which will not grow in the open air, and all of them prosper with a little shelter. Undoubtedly there are insects which infest them; but these, care will exterminate. Undoubtedly some species are short-lived; but it is easy to provide a succession—and even many productions which we need to think ungenial to our climate, will succeed if we only try them. For instance, I am satisfied, from my own experience, that every farmer may have his patch of grapes quite as readily as he can his patch of beets or peas. He has only to plant his cuttings, as he would Indian corn, at sufficient distances to work them with the hoe-laborer. They will live through the winter without any covering and with less labor than Indian corn, because the corn requires planting every year, while the vines will last for a century. He will thus provide a healthy pleasant fruit for his family use, or a profitable article for the market.

I have spoken of farms and of farming, let me add a few words about the farmer. The time was when it was the fashion to speak of the Pennsylvania farmer as a dull, plodding person, whose proper representative was the Connecticut horse by his side; indifferent to the education of his children, anxious only about his large barn, and when the least cultivated part of the farm was the parlor. These caricatures, always exaggerated, have passed away, and the Pennsylvania farmer takes his rank among the most intelligent of his countrymen, with no disposition for improvements beyond the natural caution with which all new things should be considered before they are adopted. But a unwillingness to try what is new, forms no part of the American character. How can it be, since our whole government is a novelty: our whole system of laws is undergoing constant changes—and we are daily encountering, in all the walks of life, things which startle the more settled habits of the old world. When such novelties are first presented, the European looks back to see what the past would think of it—the American looks forward to find how it will affect the future—the European thinks of his grandfathers—the American of his grandchildren. There was once a profound neglect of all these things—there was a profound theory and book farming—but that absurdity has passed away. In all other occupations, men desire to know how others are getting on in the same pursuits elsewhere; they inform themselves of what is passing in the world, and are on the alert to discover and adopt the improvements. The farmers have few of these advantages; they do not meet daily at exchanges to concentrate all the news of commerce; they have no factories, where all that is doing among their competitors abroad is discussed; no agents to report the slightest movements which may affect their interests. They live apart—they rarely come together, and have no concert of action. Now, this defect can best be supplied by reading works devoted to their interests, because these may fill up the leisure hours which might otherwise be wasted in idleness or misemployment in dissipation; and as some sort of newspaper is almost a necessary life, let us select one, which, disarming the eternal violence of party politics, shall give us all that is useful or new in our profession. This society has endeavored to promote such a one in the FARMER'S CABINET, a monthly paper, exclusively occupied with the pursuits of agriculture—where we may learn what is doing in our line over all the world, and at so cheap a rate, that for a dozen stalks of corn, or a bushel of wheat or potatoes, we may have a constant source of pleasing and useful information.

"I think, however, that we must prepare ourselves for some startling novelties in farming. We were taught in our youth to consider fire and water as the deadliest foes. They are at last reconciled, and their union has produced the master-work of the world. Steam has altered the whole routine of human labor—it has given to England alone, the equivalent in labor of four hundred millions of men. As yet, commerce and manufactures alone have felt its influence, but it cannot be that this gigantic power will long be content to be shut up in factories and ships. Rely

upon it, steam will ere long run off the track into the fields, for all the human employments, farmwork is at this moment the most dependent on mere manual labor. Be not, therefore, surprised if we yet live to see some steam plough making its hundred furrows in our fields—or some huge engine, like the extinct mammoth, roving through the western forests, and moving down the woods, like a cradler in the harvest-field. Wild as this seems, there is nothing in it stranger than what we have all witnessed already. When Fulton and Oliver Evans first talked to us about the steamboat and the rail-road, we thought them insane, and already we enjoy more than they ever anticipated in their most sanguine moments. One of these applications of steam—the rising of water for agriculture—I have already attempted in my own small way. You know that the greatest enemy of our farming is the drought of mid-summer, when all vegetation withers, and the decaying crops reproach us with suffering the ungenial river by their side to pass away. In the southern climate of the old world, water curled with great oil the smallest rills, and made them wind over their fields—the hand-bucket of Egypt, the water-wheel of Persia, all the tedious contrivance of manual labor, are put in requisition to carry freshness and fertility over fields not wanting them more than our own. With far greater advantages absolutely nothing has yet been done in that branch of cultivation; may we not hope that these feeble means of irrigation may be superseded by steam, when a few bushels of coal may disperse over our fields, from our exhaustless rivers, abundant supplies of water.

"All these improvements will in many adorn or benefit our farms, are recommended to us not only by our individual interests, but by the higher sentiment of our duty to the country. This is essentially a nation of farmers. No where else is so large a portion of the community engaged in farming; no where else are the cultivators of the earth more independent or so powerful. One would think that in Europe the great business of life was to put each other to death; for so large a proportion of men are drawn from the walks of productive industry and trained to no other occupation except to shoot foreigners *always*, and their own countrymen *occasionally*; while here, the whole energy of all the nation is directed with intense force upon peaceful labor. A strange spectacle this, of one, and one only, unarmed nation on the face of the earth. There is abroad a wild struggle between existing authorities and popular pretensions, and our own example is the common theme of applause or denunciation. It is the more important then for the farmers of this country to be true to their own principles. The soil is theirs—the government is theirs—and on them depends mainly the continuance of their system. It is their system, that enlightened opinion, and the domestic ties, are more stable guarantees of social tranquility than mere force, and that the government of the plough is safer, and when there is need, stronger than the government of the sword. If the existing despoticism of the old world are to be established by two millions of soldiers, all ours will soon be decided by two millions of voters. The instinct of agriculture is for peace—for the empire of reason, not of violence—of votes not of bayonets. Nor shall we, as freemen and members of a domestic and fireside profession, hesitate in our choice of the three master influences which now rule the world—force, opinion, and affection—the *carte rouge-box*, the *ballot-box*, and the *hand-box*."

Post Office.

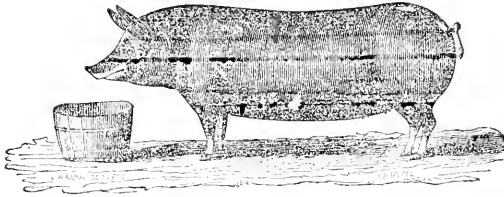
There are more than 21,000 Post Offices in the U. States. By the law of the land, the annual compensation is not to exceed \$3000. In only thirty-nine offices does the regular commission or per centage allowed to a Postmaster amount to that sum. Of these, seven only are in the New England States; six in New York; four in Pennsylvania; two in Maryland; two in District of Columbia; three in Virginia; three in Georgia; two in Alabama; three in Ohio; and one in each of the States of North Carolina, Louisiana, Tennessee, Kentucky, Michigan, Indiana and Missouri. In eighty Post Offices, the compensation ranges from \$1000 to \$1200. A very large number of Postmasters receive a compensation ranging from \$500 to \$1000.

INCREASE OF POPULATION.—According to the official returns in the hands of the U. S. Marshals, giving the population of the whole State of New York, it appears that, in 1830, the State contained 1,918,608—in 1840 it contains 2,429,476 souls. Increase in ten years, 510,868.

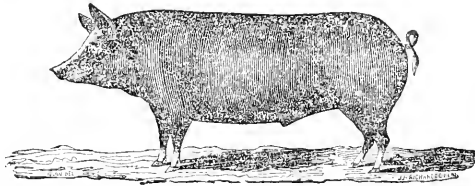
"The rust of the mind (dilettence) is the blight of genius."—Socrates.

BERKSHIRE SWINE.

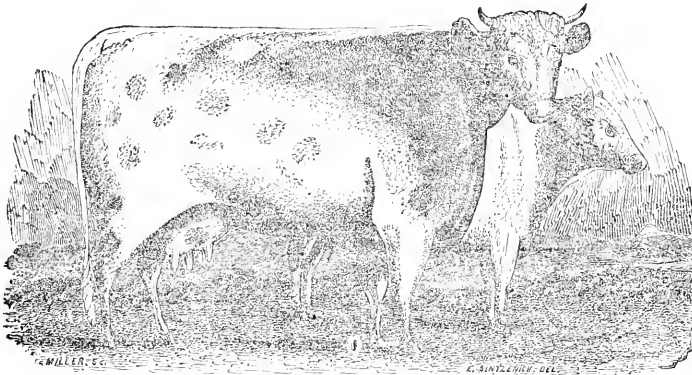
The experience of the past year, we believe, has fully sustained the claims of the Berkshires for superiority over other breeds of swine. We do not deem it necessary to devote much space to their praise; but let some of our readers should suppose that Rochester is "behind the age" in this species of improvement, we give, below, correct portraits of two pigs, belonging to Col. Amos Sawin, of this city, which received the first premiums at the late Fair of the Genesee Agricultural Society. In our next we intend giving a more particular account of this breed of swine, together with portraits of two full grown animals, belonging to Col. Sawyer.



The above is the likeness of a sow pig, 7 months old, weighing 170 lbs.; got by a boar formerly owned by Mr. Lossing, and sold to Ohio for \$200.—**NOTE.**—The curve, or hollow in the back, seen in this cut, is not usual with the breed, except when young.)



This is a boar pig, same age as the other; weighing 155 lbs.; got by Mr. Allen's "Prince Regent."



IMPROVED DURHAM SHORT HORN COW "GAZELLE,"

WITH HER HEIFER CALF "HEER."

THE PROPERTY OF THOMAS WEDDLE, ESQ.

Gazelle is three years old, roan color, with the red and white indistinctly and richly blended; and is an excellent handler. The cut exhibits the symmetry of her form, which in its true proportions and full development of all the fine points, is not often found in such perfection in one animal. She is not particularly large, but short in her legs and fine in her bone, of great width and remarkably straight both on her top and below. She has indications of a good milker, but having brought up her own calves, neither the quantity or quality have been particularly tested.

GAZELLE was bred by Thomas Weddle; is by his imported Rover (alias Charles—1-16) from the herd of the Earl of Carlisle; dam, his imported Prize (alias Crocus) from the herd of Henry Edwards, by Romulus, (2563) gr. dam Prize, by Malloy's, (1183) gr. ex. dam Tulip, by Regent, (514) gr. gr. gr. dam Primrose, by North Star, (159) gr. gr. gr. gr. dam by R. Colling's White Bull.

HEER is nine months old, color pure white; by American Comet, posessing all the choice points and frame of her dam; a fine mellow hide, and of course handles admirably.

Hints for the Month.

The most important hint, we believe, which we can give to farmers at this season of the year, is to *avoid working without pay*. Working for half pay, too, is to be shunned. To remove as far as possible from such unprofitable labor, it should be the aim of every one to make his work tell to the best advantage. A man may be wonderfully industrious, rising at four, and aborning till eight at night, but unless he gets a full return, it is still rather discouraging. To enable him to do so to profit, let us enter a little into detail.

The farmer works for half pay, who suffers his domestic animals to eat, drink, and sleep, exposed to all the fury of rough winter in this northern region. He has labored to obtain his stock—paid full price for them—and his hay, straw, grain, and roots, (if he has any,) have cost him their due share of sweat and fatigue. Now, a want of care,—suffering his animals to shiver in the winds, treading their hay under foot, starving them at one time, and over feeding them at another,—will cause the consumption of twice as much food as will keep them in good condition if properly managed, and he will have poor, weak, and perhaps diseased ones, as the reward of his labor next spring. He will work for half pay.

Let all your animals therefore be well supplied with shelter—with racks—feeding troughs—clean litter—and good watering places; let them be kept clean and fed regular; and save your lay by the free use of a good stout cutter,—if you wish to avoid unequitable labor.

Shelter, will prevent cattle from suffering from cold, thus reducing their flesh—will prevent disease—and keep them in better condition for the same amount of food given. It is absolutely necessary where animals have been suffered to become weak and diseased. In sheep, it will not only prevent emaciation, disease, death,—but increase the quantity and improve the quality of the fleece.—Good racks for feeding will prevent a great waste of hay. Feeding troughs are necessary for roots, meal, and chopped straw. Clean litter is not only indispensable to the health and comfort of the animal, but exceedingly valuable in the manufacture of manure, and should therefore be used freely. During severe weather the most manure will be made by not removing it from the cattle stable, oftener than once in two or three weeks, the successive layers of straw absorbing and retaining more effectually the liquid parts, except the stable floor has been expressly constructed for this purpose; but in continued moderate or thawing weather, the stable should be daily and thoroughly cleaned. Good watering places are especially necessary, as animals often suffer the want of water from the inconvenience in procuring it. Springs are better than running streams, the ice often shutting out the animal from the latter, unless some one can break it several times a day for them. Under drains, from wet portions of land, by forming artificial springs at their foot, make excellent watering places in winter, as well as improve the land. Cleanliness is highly important, filth often being the first step to disease, as well as the last. And regularity in feeding is also very necessary, as every animal has a clock in its head, by which it accurately registers the times of feeding—or at least appears to do so. Dr. Franklin said that creditors were a superstitious sort of people—great observers of set days and times; domestic animals appear to be equally so—rigidly observing appointed period; and doing penance for their owners by fretting away large quantities of their flesh, if these periods are not strictly observed.

The farmer works for full pay, who employs himself through winter in doing work which must otherwise be done in summer to the detriment of all order

and all this. Such a farmer takes time by the fore-
 top—cuts his stove wood and has it well seasoned and
 a abundance by next summer—cuts next winter's
 wood, and has that also well seasoned, thus saving one
 third of weight in drawing, more than half its value
 or burning, and prevents cold rooms, smoky fires,
 and long faces, on cold winter mornings. He puts ev-
 ery thing in order about his premises which can be—
 puts up fallen rails on fences—repairs his stone walls
 where needed—nails loose boards fast, on his board
 fences and gates, especially those next the public road,
 so as not to be troubled by all the vagrant cattle and
 ill-bred colts of the neighborhood, who are ready to
 offer every thing in an untidy shape that they can lay
 their rascally mouths upon, without regarding the
 rights of *meum and tuum*. He procures seed for next
 season, repairs and puts tools in order, and attends to
 hundred other things sufficient to keep him busy.
 And every farmer would find enough to occupy all his
 time during the short days of winter, at fall, or even
double pay, by constantly keeping a memorandum of
 what needs doing in his pocket, on which every thing,
 as it occurs to him, is at the moment recorded; espe-
 cially if he employs his long evenings in reading and
 storing his mind with useful facts and information,
 derived from the experience of others.

Petitions for Legislative Aid.

The following extract is from a letter not written
 or publication, but we give it as a specimen of quite
 number received by us during the past month. It
 will be remembered that Mr. Parsons was President
 of the Niagara County Agricultural Society as long
 as it was in existence.

"On the subject of 'Legislative aid to agriculture'
 this State, I am glad the subject is beginning to be
 agitated. I am a most decided friend to such a mea-
 sure.

If only one hundred dollars would be appropriated
 to each Member of Assembly, to be expended, to-
 gether with an equal, or greater amount collected by
 the County Agricultural Society, and (for the *Enire*
State) two or three commissioners appointed, af-
 ter the plan pursued in Massachusetts, I have no
 doubt the sum thus expended by the State, would soon
 be returned to her treasury, in tolls alone, with an in-
 crease of fifty per cent. I hope measures will be
 taken, without delay, for bringing the subject, on an
 early day, before our Legislature, in a strength of
 voice, and a fullness of expression, that will not be
 disregarded. There is, in my opinion, no question,
 but such an appropriation can be obtained at the com-
 ing session, if the voice of the farming community
 could be so expressed.

And the farmers would, most undoubtedly, so ex-
 press themselves, if the subject were but fairly brought
 to their consideration.

Yours, &c. very respectfully,
 Lockport, Dec. 18, 1840. W. PARSONS.

There seems to be but one opinion as to the prop-
 erty of petitioning for Legislative aid—and not much
 difference of opinion as to how that aid can best be
 applied. After consulting quite a number of experi-
 enced individuals on this subject, we drafted the fol-
 lowing petition with a view to meet the wishes of the
 majority, and believe it will give general satisfaction.
 Several hundred of them have been printed and sent
 to Post masters and others who it was supposed would
 circulate them. Any persons who desire to sign or
 circulate them, and do not find one at the post office,
 can write a copy.

It is hoped that all who receive the petition, will
 give it their prompt and efficient attention. Take
 your horse and sleigh, and in half a day you can call
 on a whole town or neighborhood, and get a score or
 two of signatures, (and also a number of subscribers to

the New Genesee Farmer.) Try this, and we trust
 the result will be such as will convince you that your
 time was not mis spent.

The petitions should be sent to some member of the
 Assembly, at an early day of the sitting of the Legis-
 lature. Where several are circulated in one neighbor-
 hood, the names can be cut off, and all attached to one
 petition.

To the Honorable the Legislature of the State of New
 York in Senate and Assembly convened:

We, the subscribers, being mostly Farmers in the
 County of ——— do humbly present—

That, as Agriculture is the origin and foundation
 of all real wealth and prosperity, and the chief source
 of human subsistence, its improvement is a subject of
 the highest importance, and demands the particular
 encouragement of Government. And, past experience
 having shown that the improvement of Agriculture is
 best promoted by County Societies, Exhibitions, and
Premiums; which the same experience has shown
 cannot long be sustained by individual contributions;
 we do therefore pray your honorable body to encour-
 age the formation of *Agricultural Societies* in each
 County, and grant a small appropriation from the pub-
 lic fund for their support—according to the ratio of
 population—say one hundred dollars annually to each
 Member of the Assembly: to be continued for the term
 of *ten years*, subject to such regulations and restrictions
 as may be deemed necessary, and conditionally that an
 equal amount be raised by the Society.

And we further pray your honorable body to provide
 for the appointment of three or more *Agricultural*
Commissioners, for the term of *three years*, whose
 duty it shall be to visit each County in the State, and
 encourage the formation of Societies, deliver addresses
 and write communications on the improvement of Ag-
 riculture; and make an annual report to the Legisla-
 ture.

Your petitioners humbly conceive that such ap-
 propriations would tend greatly to promote the prosperity
 and honor of the *ENTIRE STATE*—increase its wealth
 and productions—augment its canal tolls and revenues;
 and enhance the value of its lands. We do therefore
 confidently hope that your honorable body will grant
 our request; and that a law for that purpose will be
 passed during the present winter. And, as in duty
 bound, we will ever pray, &c.

**PETTERS,
 CONDENSED FROM EXCHANGE PAPERS.**

IMPORTS AND EXPORTS.—During the last ten
 years, imports have been \$41,000,000 of wines,
 \$118,000,000 of silks, and \$34,000,000 of iron; to-
 tal \$243,000,000.

In 1839, exports of domestic productions were but
 \$97,000,000; imports were over \$170,000,000.

Why not raise our own silk, manufacture our own
 iron, and so forth, and save our hard money?

THRASHING CLEAN.—Henry Colman says, that in
 passing wheat that was considered *well thrashed* by
 the flail, afterwards through a good machine, he has
 obtained at the rate of two full quarts to the bushel,
 or one sixteenth of the whole; reminding him of the
 Irishman's straw, who on being asked the cause of
 the fine condition of his horse replied, "He has
 nothing to ate but white straw, and that not well
 thrashed."

A NOBLEMAN FLOUCHING.—At the late exhibition
 of the English Agricultural Society, an American plough,
 (the kind or name not mentioned,) sent there on
 purpose, was tried. It was "huddled in a masterly
 manner" by the Duke of Richmond, but was com-
 mended for its simplicity only, but not for its effi-
 ciency.

COSTLY AND PROFITABLE.—Wm. P. Curd, Esq.,
 of Fayette County, Ky., has 14 Berkshire, and 3 Irish

Gizzer breeding sows; and 4 Berkshire, and 2 Irish
 Grazier hogs; which cost him three thousand dollars.
 Was he a fool for paying this enormous sum? Let us
 see—during two years 31 silver cups have been awarded
 at different fairs to these hogs. From them he has
 already sold 110 pairs of pigs at \$10 a pair—equal to
 \$1,100. 254 sows, some of which have been sent
 200 miles, have been bred to his hogs at \$10 each—
 making \$2,540. So much for having the very best
 animals. And his customers will find it quite as profit-
 able before they are done with farming.

CROPS IN OHIO.—A. B. Allen, in a late number of
 the Cultivator, writing from the valley of the Scioto,
 says the crops are so abundant, that corn commands
 only, 12½ to 15 cents, and wheat 45 to 50 cents per
 bushel; and that hay in the country is \$2 to \$3
 a ton.

LARGE CROP OF PUMPKINS.—E. Hersey Derby of
 Boston, planted 70 square rods of ground, in well-ma-
 nured hills 9 feet apart. A heavy crop was the re-
 sult. Some of the pumpkins weighed 112 lbs. The
 weight of the whole crop was no less than 22,329
 pounds, or at the rate of more than 50,000 lbs.
 to the acre—about 50 wagon loads of ordinary size.

IMPORTANCE OF ROTATION.—M. S. Kirkbridge gives,
 in the Farmers' Cabinet, the produce of a lot of
 ground, cultivated for the last three years with sugar
 beet, as follows:—1st year, 42 tons per acre; 2d year,
 25 tons; 3d year, 21½ tons.

RATS AND MICE.—A correspondent of the Farmers'
 Cabinet, estimates, at a very moderate calculation,
 the amount of depredations caused by rats and mice,
 in the State of Pennsylvania, at \$600,000, annually.
 He recommends terriers and ferrets as the best means
 of destroying them.

MONEY CHANGING POCKETS.—Henry Colman says
 that in consequence of the English buying blockaded
 Canton and the rise in the price of tea, that the profits
 of a single Canton ship are stated at 200,000 dollars!
 and that three commercial houses in Salem have re-
 ceived by this advance of price the vast amount of
 1,500,000,—“if any farmer can emulate such a
 sum.”

For the New Genesee Farmer.

"Agricultural Commissioner."

The importance of having a State officer of this kind
 can scarcely be overrated. Most farmers are so much
 occupied with their needful labor as to leave them but
 little opportunity for ascertaining the nature or value of
 the improvements in their profession, which are con-
 stantly taking place.

If a qualified individual could give his entire atten-
 tion to whatever pertained to the interests of this im-
 portant subject, a great amount of valuable informa-
 tion would soon be placed within reach of all. New
 implements, or those already in use, would be sub-
 jected to rigid examination, and their comparative merits
 ascertained. The purchaser then, instead of relying
 upon the interested manufacturer, would receive a
 valuable article without paying double its worth—
 Thousands of dollars are annually expended in our
 country for labor-saving machines which prove to be
 inferior or worthless.

The Commissioner, by frequently visiting the
 several counties, would become familiar with the methods
 of farming adopted in each, and prepared to recom-
 mend whatever experience might justify. He would
 examine the different varieties of seed, and establish
 their relative value; and the monthly reports would
 convey a definite idea of the condition of some por-
 tion of the State.

He would hold frequent meetings for the purpose of
 imparting information and encouragement, assist at
 the formation of societies, circulate agricultural pa-
 pers, and, in short, by every means in his power en-
 deavor to make the knowledge of each individual a
 part of the common stock. W. R. S.

The following very just remarks should be well understood by every experimentalist in agriculture.—Although applied only to manures by the writer, they are not less applicable to every thing else connected with the cultivation of the soil. Experiments often produce quite different results, from the difference of soil, climate, season, or other circumstances connected with them, which may be all essential, but which are entirely omitted or indefinitely mentioned in the statements of those experiments.

From the British Farmers' Magazine. Reporting Experiments with Artificial Manures.

In all our agricultural publications now issuing from the press, we see many accounts of experiments made for ascertaining the value of certain substances recommended as manures, either for top-dressing or ploughing in. Some of these accounts are elaborately, and, no doubt, faithfully written; and sometimes accurate, or at least not very unfavorable. Sometimes, too, we are told of the same material having contrary effects on land of precisely the same character, especially if situate in different parts of the kingdom. Now these discrepancies may often arise from ignorance or want of consideration of the peculiar effect or action of the material employed.

Besides the various substances which have been used as manures from time immemorial, there are others, chiefly minerals, which are brought into use with various success. The reports of such trials are not always uniform; and defective in so far as the character of the weather or season following the application is omitted to be stated. In my own practice I have used soap extensively for top dressing wheat, and have harrowed and rolled it in; but if dry spring and summer followed, the soil was of no service. I have used chalk and lime as dressings for light gravelly land; but if a wet season succeeded, little or no immediate effect was observable. The same result followed the application of salt, on the same description of land, under the same circumstances of season. And the reason for the non-efficacy of these three last named substances was perfectly obvious; all three are ready absorbents of water from the air, and in dry seasons are eminently useful to growing crops; whereas, in a showery time, the crops need no such assistance.

Saltpetre and nitrate of soda are at present fashionable top-dressings; and those best acquainted with these substances affirm that they are often injudiciously used. On wet tenacious land they can never be so efficacious as on dry sandy or gravelly soils; nor in wet seasons so much as they certainly must be in dry. If I be not mistaken in attributing to them such effects, they will always be considered as doubtful fertilizers; because they must be used before it can be ascertained, except by conjecture, what sort of season is to follow.

Mr. Cuthbert Johnson observes, that the "agricultural uses of saltpetre have not been examined so carefully or generally as they ought to have been." And G. Kimberley, Esq., of Troutworth, "regrets that it has been hastily adopted, without reference, in many cases, to season, soil, climate or quantity; and as a few fortunate experiments have started into a fashion the use of these articles, so one or two unreasonable or improper applications have at once condemned them to neglect and oblivion."

Such reports show decidedly how necessary it is to know precisely the effects of those artificial manures; whether as the food of plants, or improvers of the staple; whether as exciters of vegetation or solvents of the nutritive matters already in the soil; and also under what circumstance of weather or season they are of most active, or altogether neutral. These are questions for the agricultural chemist to prosecute; so that no farmer need work in the twilight, or be in doubt concerning the direct effects of any manure which comes recommended from competent authorities.

And in all future reports of experiments made with any of those uncommon articles of manure, the reporter should not omit to state what kind of weather has prevailed during the experiments; for the effects, especially of saline substances, are very much determined by the state of the weather.

J. MAIN.
[Our respected correspondent is right. Much of the success or otherwise, of these, and many other manures we could name, must depend on peculiar circumstances of soil and season. We have heard saltpetre abused one year, and highly extolled in another; although tried on the same soil, the same description of crop, and by the same person.—Ed.]

Wheat and Hay—stacks protected from Lightning.

The following ridiculous method, from an English paper, is going the rounds in this country, but we trust no intelligent farmer will be deluded by it. It consists merely in placing a broken glass bottle on the highest point of the stack, glass being a non-conductor. It must be evident to any one, acquainted with electricity, that this can afford no protection whatever, and would no more prevent the downward descent of a thunderbolt upon the stack, than a spade-fil of turf would stop the cataract of Niagara. A non-conductor is negative in its properties; and a conductor can only carry the electric discharge safely to the ground.

Ice Houses on the Ground.

J. S. SKINNER, Esq.—DEAR SIR—In your paper of the 12th, you ask for information relative to the construction of ice houses above ground. The information below is not from actual experience but from actual observation. In New Orleans and Mobile, they are all above ground—in the former place, from the same cause, to a greater extent than what you complain of. Their having succeeded so well there, is the cause of their being used in the latter place, where, in 1838, there were two—one built for the purpose, a common frame building, the other an old brick warehouse. I have examined both, being desirous to know how ice houses could be fitted above ground to keep ice from rapid evaporation. I found there was an inner partition made of boards, space, I think, four feet; this divided into two parts, the one next the outside filled with rice chaff, the other with charcoal; nothing on the floor but straw and chaff. On the garret floor there were several scuttles, or trap-doors. The ice was hoisted up through them, and then taken down a pair of steps fixed on the outside the building.

The latter also also in the garret part. He informed me the evaporation was very small, much less than he could have expected. Even in that warm climate, I do not think it necessary to have them earthed outside; but a shade of trees I think would be of service.

Perhaps in this climate, a space of two feet, filled with chaff and charcoal, would be sufficient. I think wheat and oat chaff would be a sufficient substitute for rice.

Respectfully,
D. GRIFFITH.

Since the preceding very obliging communication was received, we have conversed with R. Peters, Esq., of Philadelphia, to whom the subject is practically and philosophically familiar. He satisfied us that in all situations it is better to build above ground, with a view to more perfect preservation. When the house is built below the surface, the earth is of a non-perture and consistence to make it a conductor, instead of a non-conductor of heat. The great, if not the sole object, in a work, is to get your ice enclosed in a space which is surrounded by the most perfect non-conductor of heat! and that is most easy and practicable, by building one house within another, not permitting them to touch at any point, leaving between the two a space of say 15 or 18 inches, to be filled in compactly as the houses progress from the bottom, with charcoal or tan. We intend to have a foundation of floor of sand, rising any 12 or 18 inches above the ground, on the outside of the building, and on the sand place a covering of tan bark. The melting of the ice may be expected to be absorbed by the sand, any surplus passing off, under the sills. The house we think will be best covered with a very thick covering of fodder or marsh grass that will turn the rain—being vented at each end—Who sees any objection to this plan? As for shade we shall choose to build in a situation exposed to the sun, where evaporation will be most active, and moisture least liable to accumulate.—*Amr. Far.*

National Gallery of American Manufactures.

The new Patent Office, lately erected at Washington, is a very large and splendid building, and one which will long reflect credit on the nation. Besides containing ample room for the numerous models and specimens of patented inventions, provisions have been made for a national gallery of American manufactures, agricultural productions, &c. For this noble project, the nation is mainly indebted to that well known friend of improvement, the Hon. H. L. ELLSWORTH, Commissioner of the Patent Office. We

rejoice that the business of executing the liberal plans of the government, in the formation of this institution, has devolved upon one so eminently qualified for the task. And there can be no doubt that, under the supervision of this able and patriotic gentleman, a collection will in a few years be formed, that will prove highly useful, as well as honorable, to the nation.

We take particular pleasure in publishing the following notice, forwarded to us by Mr. ELLSWORTH, on account of the prominence which he gives to agriculture. This art of all arts has long been too much neglected by our Congress and State Legislatures, and it is pleasing to see, of late, so many indications of a disposition to give the subject something of that consideration which its importance demands.

PATENT OFFICE, Nov. 20, 1840.

Notice is given that the Hall in the new Patent Office, for the exhibition of manufactures, is now completed. The Hall is spacious, being 273 feet long, 63 feet wide, 30 feet high, and fire proof.

Agents whose names are annexed, will receive and forward, free of expense, articles which may be deposited with them. These articles will be classified and arranged for exhibition, and the names and address of the manufacturer (with the prices when desired) will be carefully affixed. Few, it is presumed, will neglect to improve the opportunity now presented, of contributing their choicest specimens to the *National Gallery of American Manufactures*, where thousands who visit the Seat of Government, will witness with pleasure the progress of the arts in these United States.

It fairs in limited sections of our country, have excited interest, what must be the attractions of a national exhibition, enriched by daily additions.

The agriculturist may be gratified to learn, that commodious rooms are provided for the exhibition of agricultural implements, and also for the reception of seeds for exhibition or distribution.

The Commissioner of Patents, being authorized to collect agricultural statistics, avails himself of this opportunity to solicit information of the condition and character of the crops in the several sections of the country. These data will aid him in presenting with his annual report, the aggregate amount of products of the soil, and it is hoped that the public may be guarded in some measure from the evils of monopoly, by showing how the surplus in one portion of the land may be supplied from the surplus in another.

Names of agents who will receive and forward packages for the Patent Office. Collectors of the Customs at Portsmouth, N. H., Portland, Me., Burlington, Vt., Providence, R. I., Philadelphia, Baltimore, Richmond, Charleston, Savannah, N. Orleans, Detroit, Buffalo, Cleveland. Surveyors of the Customs—Hartford, Ct., St. Louis, Pittsburgh, Cincinnati, Louisville, R. H. Eddy, Boston, Mass.; David Gardiner, (Custom House), New York.

HENRY L. ELLSWORTH,

Commissioner of Patents.

Editors are very respectfully requested to give the above an insertion in their papers.

Education for Farmers.

The following just remarks are taken from an address delivered before an agricultural society in Ohio.

"I well know the fondness of a parent's heart. I am a parent and can appreciate a parent's feelings, and there seems to me nothing unnatural in the desire of a parent that his children should occupy honorable and useful stations in the world. But still those farmers greatly err who suffer their sons and their daughters to be brought up with a feeling of contempt for the toils of the husbandman—who suffer them to feel that because their parents have been able to confer upon them, it may be a college education, that henceforth the axe and the hoe are implements unworthy of their touch. The fostering of such feelings of pride in the bosoms of your children, is fraught with the most dangerous consequences to them. Show to them, by your efforts to apply the benefits of science to the culture of the soil, by the interest which you manifest in extending improvements, and by conferring that benefits of your experience upon others, that you regard your calling as useful, important, honorable, and respectable, and instead of crowding your children, as so many misguided parents do, into the learned professions, or into the commercial ranks, let them see that you are not ashamed of your occupation, that you feel that it ought not to be despised, and that you regard it as honor enough for them to be well qualified

to tread in your footsteps, and to perfect and carry out the improvements which you have commenced. So they will come up to take their places in society, feeling, and truly too, that the occupation of the agriculturist is both honorable and respectable—and so they will be kept in a great measure from the indulgence of a foolish pride, and from encouraging in their breasts a vain ambition which can never be realized. And you may be sure that in subsequent life they will be called to fill such stations of honor or of trust, as they may seem to be fitted for, by their talents, their acquirements and their worth. At all events, they will be useful, respectable and substantial citizens, contented and happy themselves, and disquieting business and content to all around them. How much better, how much more rational, how much more honorable and respectable thus to be, than for young men to start off with the idea of being fine gentlemen, and attempting to live upon the scanty pittance furnished by their wits. Such unhappy and misguided young men, soon become the small politicians of your villages, or the brawlers of the grog-shop, and will soon end their career, if not in crime, in neglect and insignificance.

"The fostering, building up and sustaining of the Common School system, is to the farmer of paramount importance. To the Common School must be looked mainly, for the education of his children, and for the support of such schools should he be willing to make some of the largest sacrifices; or rather he should not call any thing which he does in that behalf a sacrifice. Let efforts be at once made to introduce into all our common schools, all those desirable improvements in education which the experience of the age suggests. Let none but suitable and competent instructors be engaged, and whatever the cost of such may be, let the expense be cheerfully met. Let not instruction be confined to the mere elements of education, such as reading and spelling, but let the physical and natural sciences be introduced, and proper instruction given in all those higher departments which are calculated to expand the minds, and make business men and women of your sons and daughters. Let elementary books on agriculture be introduced into the schools, that the education of your children may be in part at least, an agricultural education, and however learned or renowned they may subsequently become in the world of letters, they never will despise the calling to which their fathers were attached.—Let the standard of the moral character be elevated, and let the cultivation of the religious affections and principles not be neglected. Thus educated and thus reared in habits of industry, they may be safely sent forth to enact their part on the stage of life.

Why don't he do it?

When the Farmer *knows*, that a gate is better, and as a time and labor saving fixture cheaper, than a set of bars and posts, and without calling on a carpenter he can himself make one, *Why don't he do it?*

When he has no other fastenings to his gates and barn doors than a rock rolled against them, and in a single evening after supper is able to make a better, *Why don't he do it?*

And when he knows it's better and more profitable to have good fences than poor, *Why don't he do it?*

Or if he thinks it will not quite cost to make good fences, and only thinks so, and this mere guess work, and by calling on Mr. Townsend of East Haven can ascertain the facts in relation to it, *Why don't he do it?*

Or if he wishes to see some of the most approved fixtures appertaining to farm buildings and the keeping and feeding of stock, &c. &c., and can do so by calling on the above named gentleman, *Why don't he do it?*

Or when he sees the boards dropping from his barns and out buildings, and like heaps of rubbish lying in piles about his premises, and need only nailing on again, *Why don't he do it?*

Or if he is afraid of the expense of mills and is always crying up the maxim of Doct. Franklin, to "save the pence and the pounds will take care of themselves," and he knows that the same Doct. Franklin also said that "many men are penny wise and pound foolish," and he is not careful to think of the precept contained in the latter, *Why don't he do it?*

If it is a saving of nearly half the measure of a farmer's stock, by keeping them shut up in yards, instead of running at large through most of the winter, *Why don't he do it?*

When he knows that many of his fields would be greatly improved by ditching, and by the removal of large stumps and stones, *Why don't he do it?*

And when he knows that his pastures would yield nearly double the feed, and of a better quality, if the

bushes were all cut and culdred, *Why don't he do it?*

And if he can add fifty per cent. to the product of his clover fields, and even his pastures, by the use of Gypsum, *Why don't he do it?*

If a farmer of fifty acres has (as he should have) for a good corn shelter and one of the many improved fanning mills, and he has not already obtained both, *Why don't he do it?*

And if it is cheaper, actually cheaper, to burn dry wood than green, and to use a stove instead of an open fireplace, *Why don't he do it?*

And finally, if every farmer is not a subscriber to an agricultural paper, *Why don't he do it?*—Farmers Gaze.

Cure for "Disease in Swine."

Messrs. Editors.—In the November number of the Farmer, I observed an inquiry from Mr. Webber of Michigan, respecting the cause and cure of what appears to be the *Blind Staggers* in Swine.

As to the cause of this disease, I am not able to speak decidedly; but suppose it to arise from a determination of blood to the head. Leaving the cause, therefore, to other hands, I will proceed to the cure. Catch the hog, and with a sharp knife, make an incision through the skin, 2 or 2½ inches in length, vertically on the forehead, about 1½ inches below the top of the head, and insert into the wound and under the skin, as much fine salt as possible. Repeat the application hourly, and it will very soon effect a cure.

Respectfully yours, &c.

ZECHARIAH CONE.

Batavia, Dec. 1840.

Sowing Orchard Grass Seed.

I should have answered your inquiry (in No. 10,) respecting the quantity of Orchard Grass Seed required to sow an acre, &c., but I have been long absent from home, and seeing the opinion of Dr. James Messie, President of the Philadelphia Agricultural Society, in your Nov. number, I have only to say, that my opinion does not differ much from his, and I fully agree with him on the advantage of sowing Orchard Grass and Clover together.

Yours, &c.

ZECHARIAH CONE.

Beets for Cattle.

As experience, and not speculation, is what farmers need, I will give my observations in feeding beets to my cows during the two past winters. In 1838 I put up about 300 bushels of Mangel Wurtzel beets, 100 bushels of turnips and some potatoes for the purpose of experimenting in feeding my cattle through the winter. I knew nothing but that what I learned from books. As I was acquainted with a farmer (or my friend) who fed with roots. At first I was at a loss to know how to feed them, whether in a raw state or cooked, but having determined to try both plans, I commenced the work and ended did well. Young animals are peculiarly fond of the raw beets and thrive astonishingly on them; but for cows that give milk, they are better boiled, particularly if a steamer can be used in the process. Though milk cows should have raw beets once in every two or three days if grass cannot be had.

The turnips and potatoes were given precisely as the beets; but I could not determine that either had the preference over the other, as the cows gave about the same quantity of milk, and their condition did not seem changed by either. In feeding the same animals with beets, it was easily told that one-third less than of the turnips or potatoes would make them give the same quantity of milk, of better quality, and they showed better keep. The beets made the milk better, the butter better, and the cows look much better. On one half bushel of beets per day to each cow, with straw and a little meal or bran mixed in, they continued in good condition through the winter, gave as much milk as in the summer, and the butter was as full as good as in May. My experience during the past winter (1839-40) while I fed on roots, only confirmed my former conclusions.—*Western Paper.*

Our Trade with France.

The New York Express of Wednesday, says—"The export of specie has, in its operations, been quite remarkable. Exchanges on all Foreign places, France excepted, have been in favor of this country. No specie has been wanted, and very little has been

shipped to any other place. France has, particularly, for the last three months, been receiving large sums in silver. The question naturally arises, how is this? Why is it that while there is a perfect reciprocity in trade with any other country to such a degree, that we neither receive nor pay any considerable sum in specie, France should bring us in debt at once full three millions of dollars; and taking it she takes not gold, which we can spare, but will have all silver, a description of coin that we cannot spare. The great secret is, in the massive introduction of silks. The duties being now removed, this description of goods comes in at very reduced rates. Fashion unfortunately clothes our females in silks, and even the males take a large quantity.

"Our great staple, cotton, is the principal article that is sent in payment, and at the unprecedented low rates it is bringing in Europe, it falls short of a sufficient sum to pay for our indebtedness. To England, besides the vast sum we pay for goods, we have to provide for a large amount of interest, and with all this running against us, we are enabled to square up with produce; and yet with France, from whence we receive but little else than silks and wine, which contribute but little to our national revenue, we are continually in debt. Nor is there much prospect of any favorable change, so long as fashion runs in favor of silk goods. So long as they are admitted free, and so long as cotton continues at the present low rate, it is hardly possible that there can be any change for the better."

Exercise, a Moral Duty.

The faculties with which our Creator has endowed us, both physical and intellectual, are so dependent upon exercise for their proper development, that action and industry must be regarded as among the primary duties of accountable man. "In all our conceptions," says an ingenious writer, "exertion is connected with success and renown." A triumph without an enemy combated, and a victory won; a prize where no course is marked out and no competitor starts with us in the race, are notions which do not find a ready admission into our minds. Such is our constitution, that, according to our usual train of thinking, that where there is no exertion, there can be neither honor or reward. Progress in moral and intellectual excellence is our duty, our honor, and our interest. To be stationary, or to retrograde, is disgraceful. We came into the world feeble in body and in mind, but with seeds of improvement in both; and these seeds grow, according to the cultivation they receive from exercise. The body grows in stature and in strength, and the mind gradually expands. But exercise is requisite to the development both of our corporeal and mental capacities. In the course of years indeed, the body grows; but without exercise, it is limping, feeble, and inactive; as the mind, wholly undisciplined, remains in a weak and infantile state. The exercise which is requisite in order to bodily health and vigor, and the evolution of our moral and intellectual powers, is not only the chief means of our improvement, but also the main source of happiness. Without exercise of body and of mind, there can be no happiness.

In one respect the farmer has the advantages of almost all other classes of the laboring community; his evenings he has to himself, while the mechanic has to labor from morning till 9 o'clock in the evening, the farmer's day commences with the rising and closes with the setting of the sun, and in a week and a half the farmer finds many little jobs of work, to which he very economically appropriates his evening leisure, yet the greater part of the long winter evenings he can appropriate to his amusement and instruction. In no place do we see more cheerful countenances at around the blazing fire upon the farmer's hearth. There, at the merry apple paring, or at the neighborhood collection, or even in the family circle alone, do we find social happiness in its pure simplicity. What an opportunity this, for an acquisition of knowledge! What farmer who improves these opportunities can be so indolent? And what instruction so interesting as that which gives him a knowledge of his own employment? Here we would suggest the importance of every farmer having a supply of agricultural books and papers. It seems to us that no one can be insensible to their utility. If this should be a suggestion of self interest, which we do not deny, still we believe it coincides with the interest of the farmer. We will not enlarge on this subject, as we apprehend it would not convey that knowledge which we recommend. We will barely say, that we expect our subscribers to increase as the evenings lengthen.—*Silk Culturist.*

[illegible]

In addition to the above, there was raised in this county, in the same year, 85,532 bushels of barley, 691,672 bushels of oats, 4,639 bushels of rye, 19,247 bushels of buck-wheat, 231,576 bushels of Indian corn, 4,520 pounds of hops, 21,452 pounds of hemp and flax, 189 pounds of cocoons, and 1288 pounds of wax.

The number of cords of wood sold, was 23,538.—The amount of pot and pearl ash manufactured in the

county, was 304 tons. The value of poultry \$94,625.

Of the population of the county, 117 are free persons of color, viz: 67 males, and 50 females, who were residents of the county on the first day of June last.

There were also resident in the county on the first day of June last, 135 Revolutionary and Invalid Pensioners.

The Fruit Garden.

In our last volume we treated of several particulars respecting the Fruit Garden; and we now continue our remarks for the purpose of calling the attention of independent farmers to the subject. In so favorable a soil and so fine a climate as that of the Genesee country, it has often been a cause of regret to us, that so many hundreds—yes thousands—of wealthy freeholders should be destitute of the delicious fruits that such a garden can supply. A few years ago, a friend of ours from a distant land, came to join us in a journey of three hundred miles. It was in the last month of summer, when the Fruit Garden yields its simple luxuries in abundance, and he was delighted with the treat. We remarked to him, however, before we parted, "Now is the time to fear—nothing of the kind can be expected tillour return." Did it turn out so? perhaps some of our readers would ask. Exactly to the letter. There was fine fruit without a drop in the

district through which we passed, but we saw it not, though we shared the hospitality of many noble friends in easy circumstances.

When we planted our Fruit Garden, we had not directed our attention to the *position* in which the different kinds of trees could be most advantageously placed; but we soon discovered that the nectarine, the plum, and the apricot, ought to have been set as near to the hog-trough as possible, on account of the Curenlio. We have already remarked that in the remoter parts of the inclosure the fruit was more injured by this insect, though we may add that in a small garden this circumstance will be of less importance.

The position for particular trees will be found of great consequence however, on another account whether the garden be large or small. Until our countrymen generally acquire a higher-toned morality; and shall consider robbing a garden as mean as to rob a hen roost, it will be safer to set the late years or quin-

GENSUS AND STATISTICS OF LIVINGSTON COUNTY

[illegible]

Statistics of Monroe Co., next month.

Decay of Ruth. Bagdasarian.

MESSES. THOMAS & BATEMAN.—When I harvested my ruta begins this fall, I found nearly one third of them were spoiled by the rotting of the upper part of the roots, and as they had not been exposed to frost or much wet, I am at a loss to account for their decay. They were harvested about the last of September, and appeared sound and good, (except that the leaves were yellow,) but on taking hold of the leaves to pull them up, the tops came off, and showed that the necks were rotten.

Many of my roots were more or less injured by grubs, but I could not perceive that this caused their decay. If any of the readers of the Farmer can explain it, I should be pleased if they would do so.

YOUNG & C.

SILAS PRATT

ces, on the outside. The rich colors of ripe fruits are very attractive; and the further we can place them from the gaze of animals who have no higher aim than present gratification,—the better. On this account a doo-yard should not be fruit-yard, except for such sorts as may be gathered green, and ripened in the house. We have no knowledge that thieves in this quarter look far enough to lead to steal varieties of cars, or winter apples.

Cherry trees should be set in the rear of the rectories, plums and apricots, but still as near to the hog-trough as possible, after these kinds are accommodated. We consider the hog-trough indeed, as an important appendage to the Fruit Garden. Where *hogs* cannot be admitted however, *poultry* may in some measure supply their place. If both are excluded, then use the spade and the hoe—strike the Catechu from the tree on sheets spread for the purpose, and show them no quarter.

Cherry trees should also be set near together—that is, not scattered in different parts of the garden, on account of the birds that come to plunder. A leisure half hour may be well spent on a seat from which shot may reach them. We knew indeed it is the fashion of the day to extol their services, and to decry every attempt to lessen their numbers; but people who are carried away by such fancies, cannot have duly considered the subject.

The cedar bird has been called “a friendly, useful, innocent visitor;” but we have yet to learn in what respect he is better than a crow or a rnt. He may devour insects in some districts, as it has been asserted, but not in ours. We have carefully watched him, in many years, and have even had his stomach examined to see what he lived on, but nothing was found in it but fruit. He comes as a plunderer, and deserves a plunderer’s reward.

The Garden and Shrubbery.

In the open ground at this dreary season, flowers—the most tender part of the plant—would be sadly out of place; and therefore ornament can only be expected in the *bark*, the *leaves*, or the *fruit*.

The bark of the *striped maple* is generally admired. White streaks on a ground in which shadings of red or green occasionally prevail, always meet the eye, except where the red becomes clearer on the twigs and with increasing intensity envelopes the buds. The green on the contrary, is seen on the old bark; and more especially on old trees, which are sometimes six inches in diameter.

The *red dogwood* (improperly called the red willow) is often ornamental. Seedlings vary much however, in regard to brightness; and not one tenth of those we meet with in the swamps are suitable for transplanting. Though naturally a sub-aquatic, it does well on common soil; for though winter and the early part of spring when its bark is the brightest, the ground is sufficiently wet.

The *paper-barked birch* has a white bark, though it is several years before the small branches assume this color. The leaves are delicate, and the whole tree is showy and ornamental.

The *golden ash* has fine yellow bark, changing from a greenish color early in autumn. This tree is considered a variety of the English ash (*Fraxinus excelsior*) and its height in London is marked thirty feet. We have one of very vigorous growth about eight feet high, much admired.

Evergreens are admirably adapted to embellish a household in winter. Among these, the *silver fir* of Europe will stand in the front rank. It is nearly allied to the *balsam fir*, but has a larger leaf more distinctly striped with white on the under side. Both are very beautiful.

Next to these we should place the *white pine* which often becomes the tallest tree of the American forest, where it has room to spread; however, the rich silky green of its foliage, is more distinctly visible and ornamental.

Not far behind, is the *white spruce*, growing naturally in swamps like the balsam fir, but soon becoming accustomed to a dry soil. Two or three years in a nursery, give it a new set of roots; and when these are acquired, with reasonable attention, it is almost sure to live when transplanted. It also attains a great height in favorable situations.

The *Norway fir* from the north of Europe, famous for its timber, is another fine evergreen with darker foliage; but perhaps not darker than the *black spruce* which is often found in mountain land and a cold soil. Near these may be placed the Chinese and American *arbuta* with fragrant leaves; and the *English yew*, remarkable for its duration and slow growth.

The *Scotch fir*, so called is properly a pine—that is, it has two leaves in a sheath. This species and the Norway fir, supply the deal boards of England.

But we have not forgotten the *hemlock spruce*. Men who are long employed in clearing land, are apt to consider every tree that stands in their way as worthy of death; and we apprehend that but few arboriculturists can be found in this class. Against the hemlock, the prejudice has been unusually strong. Without stopping to inquire on what it rested however, we shall express our conviction that this tree deserves a place among the finest evergreens when it can clothe itself with foliage from the ground. It bears training well; and the most beautiful hedge we have ever seen was of hemlock.

The common *Juniper* retains the green of its leaves in winter much better than the *red cedar*; and as it inclines to grow low with prickly leaves, it might serve for a hedge on the top of a ditch. It may easily be increased by layers or by seeds.

An evergreen, little known in this district, but remarkable for its beauty is the *tree box*. It appears to agree with our soil and climate; grows densely, and a hedge of it, in front of a mansion would be superb.

In sheltered situations the fruit of the *pyracantha* retains its fine scarlet; but the severer blasts of winter destroy its color. On the *bush cranberry* however, these have no effect; and its clusters hang in all their brightness till the commencement of mild weather in the spring.

No shrub however, is more beautiful in winter on account of its fruit than the *barberry*; and none is safer from the depredations of birds. The berries are very acid. Many people have been deterred from planting it because of its supposed influence in blighting wheat; but this charge is proved to be unfounded. It has neither philosophy nor fact to support it.

Items in Domestic and Rural Economy.

To prevent horses, which are disposed to break their bridles, from doing so, place a pad within the strap that passes back of the head, the inside of which is lined with cotton or linen, and in which the points of three or four very sharp nails, pointing inwards, are concealed. When the horse draws hard upon his bridle, these prick him, and cause him to desist.

Stoves, for heating rooms, will throw out much more heat for the amount of fuel consumed, if, as soon as the wood gets well burning, the draught before and above the fire, is closed. Far less heat is swept by the draft up chimney. On this principle, the blacksmith increases the heat of his forge, by sprinkling water upon the ignited coals, and preventing the flame from rushing out; and also, green wood on a common fire often prevents the rapid escape of heat up the chimney, for a similar reason. All stoves should

therefore be provided with a valve above as well as below the fire.

Cracks in stoves and stove-pipe are readily closed by a paste made of ashes and salt with water. Iron turnings or filings, sal ammoniac, and water, make a harder and more durable cement.

An excellent cement for broken glass, is made by grinding together linseed oil and white lead, to the consistency of a paste.

Nails are prevented from rusting by heating them, and dropping them while hot in oil.

Gates work much better for having the hinges and latches greased. To keep them so, bore a hole, and plug up a quantity of grease in the gate post, where it may always be at hand when wanted.

Ice, on door steps, may be easily removed by throwing snit upon it, which will cause the ice to crack to pieces.

Cattle should be duly supplied with salt during winter, which is often forgotten.

Hay and oats may be economized by feeding horses run bags, which they soon learn to eat.

An excellent and cheap paint for rough wood work, is made of 6 pounds of melted pitch, 1 pint linseed oil, and 1 pound of brick dust, or yellow ochre.

Cream which churns with difficulty in winter, if too sour, will speedily produce butter by the addition of saleratus. If too cold hot water may be applied—but it is better to warm the cream and keep it so. If the thermometer shows 70° of Fah. it will soon come. When minute granules of butter appear and it does not gather readily, throw in a piece of butter, and it will “lump” together in a trice.

Stumps in fields are made to rot, by placing earth upon them.

Farmers’ Homes and Children.

A much esteemed correspondent has sent us a reply to the communication of ANNETTE, in our last; but we think it is written under a misapprehension of the subject; and, as it is not very courteous withal, we are compelled to decline its publication. The writer styles himself “an old home-spun practical farmer,” and says that he “has neither been an indifferent nor a disinterested reader of what our columns have from time to time furnished on the subject of the education of children, with a view to qualify them for the business of practical farming.” He admits that “Annette has detected and exposed a crying evil, and pointed out the remedy;” but still it appears to him to be “all moonshine,” and he is fearful that the expense of “making home attractive,” according to the suggestions of Annette, will lead farmers into the “frightful swamp of bankruptcy, want, disgrace, and misery.”—We admit that there are many farmers in our land, who cannot afford the necessary time or expense for the pleasures and comforts spoken of; neither can they afford to educate their daughters in a boarding school; but at the same time there are many others who can well afford these expenses, and are not compelled to spend all their time in toiling for the necessities of life. It is a great mistake however, to suppose that much expense is necessary in order to make a dwelling pleasant and beautiful. It need not “fall be set up or established upon the most modern and fashionable foundations.” On the contrary, almost any man who has the taste and disposition, can find the time and means to surround his home with most of the attractions mentioned by Annette, without any danger of bankruptcy or ruin.

We cheerfully comply with the request of our correspondent, in publishing the following article from the *National Ensign*; and, in return, we ask him to read the article on the next following page, entitled *the Working Man’s Home*.—Eds.

From the National Eggs.

To the Young of both Sexes.

It is of great importance that persons, in early life, should prepare themselves for the part they are to act in society. There is a strong desire in both sexes to rise to respectability, and this is highly commendable; but many persons err in their attempts to gain their object.

A principal cause of the failure of young people to reach the object of their desire, is, the attempt to get rich without labor! In this way, they often aim at an object without the means to accomplish it. Thus, or many years past, young men have entered on business with borrowed capital, to an extent never before known; they have calculated upon the profits which were preposterous; they have neglected to calculate the chances of sudden declensions in business; they have entered upon house-keeping, with extravagant purchases of furniture; they have mostly failed, and reduced themselves and families to poverty. The failures and the distress which have occurred in this country within a few years exceed every thing probably that ever before happened.

Young friends, learn wisdom. It is not the order of Providence that mankind should have blessings and prosperity without labor. It is best for mankind that this should be the order of things: good moral habits are formed by industry; sudden acquisitions of property tend to prevent the formation of such habits, they are often ruinous to morals. Moderate acquisitions of property generate good habits—the habits of prudence, of foresight, and correct calculation of what is practicable.

The desire of reaching a respectable standing in life has led many to renounce labor for books, with the expectation that they can live by learning. But the number of persons who can gain subsistence by learning is comparatively small. The professions are full to overflowing; unless that of the gospel ministry may be excepted. By far the greatest part of mankind are destined to labor, without which society cannot be supported.

In forming a plan of business for life, therefore, the first requisite is to determine the course to be pursued, the occupation which is to be followed, and then to devote all possible attention to gain the qualifications essential to success in that pursuit. In this preliminary to success, persons very often make great success.

If a young man is to be a farmer, he must begin when a boy, and continue in that business. He must gain knowledge by experience, and muscular strength by labor. Books and learning will never make farmers.

If a young man is to be a mechanic, he must begin his art when young, and persevere in it, and be thoroughly master of every part of his business. Books and learning cannot supply the want of labor and experience. Farmers and artisans cannot be made in the school house or college. Most of the trades cultivated in our seminary of learning, however useful to professional men, are not applicable to all the common occupations of life. This the writer knows by experience.

It is with females as with males. They desire to live without labor, and thousands of them fail of obtaining a good settlement in life, by aiming at what cannot be obtained. Hence, the high schools often become nurseries of old maids. The daughters of wealthy men, who are sure of the means of living without labor, and such as are fortunate enough to marry men of influence, may be justified in devoting many years to languages and sciences which they are never to use; but how small, comparatively, is this number!

Most of the people of this country possess small estates, which, when divided, will not support their children. Hence it often happens that children, whom the father can support in genteel ease, fail, at his death, of the means of subsistence. Hence, probably, no country presents so many instances of young persons of both sexes, educated above their condition, as the United States. Many persons and families, within the knowledge of the writer, have been ruined or doomed to struggle with adversity all their lives from this mistake. They begin wrong, they expect to be gentlemen and ladies without the means of supporting themselves in such style.

Equally mistaken are many of the daughters of poor families. Some of them enter manufactories, where they get good wages, and dress in rich attire; neglect to gain a thorough knowledge of housekeeping, the very knowledge they most want to insure that a good sentiment of young men of industry want wives that are good house-keepers. They do not seek females for their dexterity in tending spools; but

for those who are accustomed to do all the work of a family, and to make an economical use of money. Such wives are useful auxiliaries in supporting a family; whereas such as are not accustomed to housework often check or prevent the prosperity of their husbands; sometimes they ruin them.

Much less do men, in the ordinary occupations of life, seek for females who have studied geometry, algebra, rhetoric, zoology and the higher mathematics. Such sciences are of no use to them in discharging their duties, as wives, mothers or housekeepers; they are soon forgotten, and if not, never used; nor do they ever become subjects of conversation. In the course of thirty years observation, the writer has never known a female that was educated to make the least use of such sciences; not even in the families of the affluent. Books on such subjects, read in after life, for the purpose of gratifying curiosity or enlarging the knowledge of the works of nature, may be useful for these purposes among those who have leisure, but not being necessary to qualify females for these duties, should not be a part of school education.

In no particular is the folly of females more remarkable than in their estimate of labor. They seem to think it degrading to labor in the family as domestics, when they labor in manufactories without objection. They do not consider that the proper sphere of females is in the family, and that they cannot fill that sphere without serving apprenticeship, and that they should no more dread it, than young men should disdain to be apprentices to mechanics. The young of both sexes must be subordinate to those who are older, for it is from experience and knowledge of older persons that they are to qualify themselves to be respectable masters and mistresses themselves. Girls who have no property should seek to be domestics for two or three years in respectable, well-ordered families, for it is in these they are to learn, not only to do all kinds of work, but to improve their minds and their manners. It is the best, if not the only chance which many of them can have, thus to improve, and become respectable mistresses of families.

All young persons should have a consistent English education, and for this purpose, they should have access, not only to the Bible, but to the best writings of Watts, Addison, Cowper and Mrs. Moore. In wealthy and well conducted families the poorest girls may have this advantage. By avoiding domestic service, they deprive themselves of advantages which they can never have in any other business. The pride of females often condemns them to poverty and a single life. Many mid many a female fails to gain a comfortable settlement in life, merely because she is too proud to submit to the apprenticeship of learning the duties of a house-keeper in the family of a hired domestic.

FRANKLIN.

From the Maine Farmer.

Signs of the Times.

We sometime ago, under this head, made some remarks in regard to the change of feeling at the South, respecting a "judicious tariff" on certain articles, which do not pay any duty, or but very little; such as silk, wines, &c., which may be considered articles of luxury, and not of necessity. We were not aware of trending on the political toes of either party—but it so fell out that we received sundry hearty kicks, from individuals belonging to both of them.

So mote it be, gentlemen; we have always been used to "more kicks than coppers" from our youth up, and this getting thumped from both sides of the road, is pretty sure proof that we are in the right. At any rate, one thing is certain, and you may all point and make very faces as long as you please, about it. You must have a tariff, and a pretty strong one too, or you must support your government by a direct tax. Now, which do you like best? When the last tariff was adopted, certain articles were admitted almost or quite duty free, because it was alleged that they could not be produced in this country. Among them, as we before observed, were silks. Since that period, the experiment has been pretty thoroughly tried, and it has been found that we can produce silk here with ease, but the French, on account of labor being so much cheaper with them than with us, can sell cheaper than we can, and thus defeat us in the market. Very well, this might do, if they would meet us on reciprocal grounds—that is, take our produce, or some of it, duty free. But this they decline doing. The song with them is—Free trade for us, and heavy duties for you.

The tobacco planters are getting their "blood up," and the following from the American Farmer shows what they mean to do. There is probably but, ere long, a modification of the tariff system, and we trust the different interests of the South and the North

will meet and act with more union on a subject of such vital interest, to every son and daughter of the nation.

THE BALL IS IN MOTION.—The Tobacco Planters are on the *qui vive*—to speak in plain English, on the look out. Their interest in Congress, if zealously combined, is strong enough to make itself be understood—and if not strong enough in numbers, let it log-roll, as a last resort, with some other than can make it so.

The Planters of Charles County, Md., were to have held a meeting yesterday for the appointment of delegates to the convention.

The proceedings of a meeting in Dinwiddie, Va., will be found below, with some introductory remarks from the National Intelligencer. The Lynchburg Virginian, alluding to the proceedings of this meeting, and remarking on the onerous duties levied on our Tobacco, by foreign powers, observes:

"Other nations are depressing our productive interests by monopolies and onerous restrictions. In reciprocity for all which we have pursued the most liberal policy—the luxuries of foreign lands have entered our country almost duty free. We should no longer submit to these oppressive duties. It is time for us to obtain their repeal, or counteract them by similar restrictions. If we cannot by our example induce other nations to adopt the enlightened policy we have pursued, why have we no alternative left but to try the retaliatory system."

Massachusetts Statistics.

From the returns of the valuation assessors of the several towns in the State of Massachusetts, as published in the Boston Atlas, we compile the following interesting statistics:

Population.—Whole number of males and females 610,814, being an increase in ten years of 129,392.

Polls.—Rateable polls of 16 years and upwards 172,927, male polls not rateable 12,065, ditto paupers 1707.

Buildings.—Whole number of dwelling houses in the State 96,227, shops and stores 23,019, barns 63,806, other buildings worth over \$20 and upwards 26,573.

Distilleries.—Whole number 78, breweries 15.

Mills.—Grist 737, saw 1371, paper 93.

Manufactories.—Splitting mills and nail machines 424, iron works and furnaces 133, small arm manufactories 12, carding machines 631, fulling mills 181, rope walks 64, glass factories 4, card factories 34, superficial feet of salt works 14,297,815.

Cotton Factories.—Whole number 343, looms 16,639, spindles 624,540.

Woolen Factories.—Whole number 201, looms 3032, spindles 113,457.

Other Factories.—Bleaching 10, linen 2, silk 1, works for printing calico and silks 12.

Agriculture.—Tillage land 259,038 acres, the produce of which is, wheat 101,178 bushels, rye 453,705, oats 1,226,300, corn 1,775,073, barley 149,004, hops 237,941 pounds, hemp 7 tons, flax 2, broom corn 580, upland moving land 440,930 acres, the produce of which is 467,537 tons of bay, fresh meadow land 184,222 acres, the produce of which is 135,930 tons, salt meadow land 39,305 acres, the produce of which is 26,203 tons.

Various.—Superficial feet of wharves 8,402,336, tons of vessels 438,037, ounces of plate exceeding \$33 in value 153,670.

Pride and Extravagance.

A slight exposition now and then of the way in which we "simple republicans" live, will do no harm; for the means of acquiring information as to our national income and outgo are not always within the reach of the people. The last annual report of the Secretary of the Treasury contains some information of much use to the general reader, and goes to show that we are not exactly the plain, calculating, money-making people, that some modern travellers have pronounced us. Our institutions, it is true, are republican, as they partake of the nature and spirit of our government, but society is the mere ape of foreign aristocracy, and we are as fond of our luxuries as most other people. "Hard times" is a stereotyped complaint, and the embarrassed condition of the country is made a great political subject. This is all right enough, the contending parties must have some weapons to fight with, else how would the conflict proceed? But while all these complaints were making, we last year paid to France and England, principally the former, twenty-four millions of dollars for silks, Gro de Nap, Gro de Rhine, Poul de Soul, and Tag-

shaws, a large part of which consisted of articles merely for ornament.

In the younger days of our beloved country, the American girls did not dream of such things as Tagnini shaws—their mantles were the products of their own spinning wheels and looms—but with education comes refinement, and of course its motley cousin, fashion. More than two millions were paid last year for silk and worsted, seven millions for worsted stuff goods—one million for laces, nearly the same for leg-irons and straw hats and bonnets, being about twenty-five millions of dollars for the ladies alone! whose vanity and nice ideas of fashion must be gratified. And are the gentlemen without their share of foreign luxuries? Three millions for wine, being six millions of gallons, and one million for cigars—the quantity sold away being ninety-three millions! Including sugar, tea, spices, spirits, &c., amongst the luxuries, are then fifty millions of dollars, nearly one third of the entire imports, expended in luxury and extravagance.

Our citizens have lost millions of dollars in endeavoring to establish the silk business in this country, as the great moral multi-million man will prove, yet silks are imported into this country free of duty, and consequently we are encouraging foreign manufacturers to the utter ruin of our own, and acquiring a large foreign trade, for we are not yet ready to display more patriotism, were we to advance the products of our own industry. The St. Louis Gazette, in a very sensible article on the subject, remarks "It has generally been considered the most just and reasonable policy to tax the luxuries of life, if taxes must be laid, while, by our present tariff, we tax the necessities of life and introduce luxuries free of duty. We tax the poor man's salt and clothing, and release the rich from a tax on their habiliments. We give employment to foreign silk growers, and reduce our own to beggary. Is this in accordance with the genius of republicanism? Not certainly, as we understand it. In our trade with England and most other nations, our exports pay for our imports, but France gives us in debt ten or twelve millions annually.—*Albion* Oct. 10.

The Workingman's Garden and Grounds.

"Tall thriving trees confess the fruitful mould,
The ripening apple ripens to the gold;
Here the blue fig with luscious juice o'flows,
With deeper red the full pomegranate glows." &c.
HOMER'S *Odyssey*, book vii.

It was certainly an exaggeration of Mrs. Trollope's, that no one could ever hear two Americans talk a minutes without the word *hurry*. So Bonaparte exaggerated when he called the British "a nation of apoplexies." Be it so. Caricatures often tell the truth. Ever the hideous conceit mirror, though it exaggerate ever so much, shows me some grand blemishes in my face. I have tried the experiment, in riding the crowded streets of our cities, to catch the momentary view of the passer-by. The catalogue is listed, and consists of such as these, "Ten per cent,"—"doing a good business,"—"money market,"—"operations in property,"—"exchange,"—"stock,"—"thousand dollars,"—"credit,"—"profits,"—"fortune," &c. &c.

If a man is so practical that he will not wash his face without "value received," I entertain no hopes of bringing him over. I have no purchase for my instrument. Now cleanliness is a sort of decoration;—and, perhaps, the condition of all the rest;—it follows very closely; a cleanly child is usual; the cleanly housewife is sure to produce in cottage a certain trim and symmetrical arrangement which gratifies the eye. This is neatness budding into beauty. This transition ought to be seized on wherever it appears. The pleasant little children who are yonder playing in the dust may be taught to keep themselves clean, and then to be neat. This is the path towards decoration. Taste needs development. These creatures may be bred to enjoy ornament, and thus we may get a race of people, even among the poor, who will begin to beautify the land. We are in the hope of seeing cottages along our multitudinous and dirty railways, each adorned not only with a neat surface and a close fence, but with roses, pinkies, pees, and all the pretty vegetable gifts of a loving providence; gifts which our yeomanry have too much wished to green-houses and ballads.

The ways of adorning a house by rural ideas are vast, and so well known as scarcely to need enumeration. They may be adapted to the lowliest habitation of civilized man, no less than to the villa or the chalet. Nothing but love for domestic beauty and ordinary taste are required to rear a thousand tasteful abodes

along our highways. And if but one provident household will begin, we shall find that, humble as his habitation may be, he will soon be imitated by his neighbors. Fashion itself, the cause of so many follies, may be brought in aid of virtuous enjoyment.—Let some working man make the trial, by holding up before his mind rural decoration as a distant object.—Let him secure to himself a house and garden where he is willing to spend his life. Let him, as his means allow, have it tight and finished, and by all means duly enclosed. This is the frame-work; after this come the details. Let him learn the economy of a little timely paint, and of a fence or hedge which will withstand the assaults of wind and beasts. From day to day, as he may be able to snatch a moment for breathing the fresh air, let him remove unsightly objects and make an entrance upon positive ornament.—How easy it is to set out clumps or rows of trees, for shade and fruit, flowering shrubs or evergreen hedges! How agreeable to the wife and little ones, to be called out to join in dropping the cheap flower-seed or tinning the luxuriant vine!

Among these ornaments, the highest rank is due to Gardening; including in that term the rearing of valuable trees. Children should be early taught that when they set out a fine tree, or insert a graft, they are doing a favor to posterity, and beginning that which shall continue to make others happy when they are in their graves. It has always been pleasant to me to see the house of the industrious citizen embowered in flowering vines and trees. And on Saturday evening, a season when so many forsake their work only for the potter-house or the tavern, the man who possesses such a retreat will have a strong inducement to seek his delightful home, and meet his little household among the smiles of natural scenery.

There are many very precious maxims of life which must be pointed out; they are overlooked by the masses of the people. Once indicated, they are believed and embraced. Among these is the following: *Simple ornament hinders no good use.* The watch runs as well in a comely case, as it would in a deal box. The draught is just as savory out of a chased tankard. And every good of household life is unimpaired by nesting among green foliage, climbing honeysuckles, and parterres of flowers. I long to see this acted upon by our people. I long to see them snatching a few hours from the noisy throng of idlers, and the delicious mirth of the bar-room, and spending them on the little innocent decorations of humble but delightful home.

The time required for beautifying a house and enclosure is really so little, that it scarcely admits of being brought into a calculation. A few minutes at day-break, in the spring and autumn, will in the course of a year work wonders. A few minutes of time after labor is ended may be spared by the busiest man. If his work has lain within doors, or has been of the sedentary kind, a little exercise and air, enjoyed in pruning and trimming his vines, will be restorative to his health and spirits. This is better than mere repose.—Nature abhors a vacuum of employment. Is not this positive gain? Health is "the poor man's riches;" that which conduces to it is worth more than money. Even those who are athletic, or who work at trades which give them constant motion, do not the less need something of this sort. It is not mere muscular exertion which preserves and restores health. There may be great bodily effort with no better result than fatigue. What every man requires when the day is done is gentle recreation; something between work and play, which shall break the train of moody thoughts, repair the waste of nervous elasticity, and put the jaded mind in good humor with itself and others.

When the artisan, after his evening repast, goes out to water his flowers, every thing he touches is his own; and nothing so much his own as the trees he planted or the shades he gathered. He is refreshed and tranquilized, and grows into the love of home.—These pleasures are mightily increased, when he sees around him his children partaking in his toils and joys, and cheering one another with the merry laugh to work or sport; while the wife's voice, heard within, as she sits contentedly over the cradle, adds a lovely music to the scene. This is a picture, of which the original may be found in many a poor but happy family: would that it were so in all! Under such shades as these, domestic quiet loves to dwell; and in such a spot religion finds its sanctuary.

Contrast with this case which we are often called to witness. The mechanic or laborer, has worked hard all day. At the close of his toils he turns his face homeward. But he has not provided or cherished at his dwelling any strong attraction. No refinement of taste has ever softened his spirit. It has been

too much his practice to pass his leisure hours elsewhere. He feels the need of some relaxation. He is languid from fatigue, and sullen from the disgust of labor. In such a condition he is easily attracted to the bar-room. There, amidst the odors of liquor and tobacco, he forgets his previous listlessness and anxiety, to become the victim of an unnatural and dangerous excitement. The glass, the jest, and the song make the evening fly swiftly. Late at night he wends his way home; he did not drink, yet humbled, discontented, and peevish. No children greet him with their joyous laugh; the neglected little creatures are asleep, and the sad wife is awake only through anxious expectation of her husband. Am I extravagant in tracing much of the misery in such a case to the want of taste for these little things which makes one's home desirable? As a general observation, I have never seen idle or profligate souls issuing from within the cottage pining which has been adorned by their own infant hands. And, on the other hand, it would require a stone love of virtue for its own sake, to make any youth love the foul, smoky, fenceless cabin of a thriftless laborer. Sweeten home, and you close nine out of ten doors to temptation.—*Working-man.*

Silk.

To May, I hatched a lot of silk worms, numbering about 6,000; fed them on the White and Black mulberry; after the last moult, I lost about half of them by crowding them too thick upon the shelves and being unable to ventilate the room in these hot days as we have had this summer; but the remainder wound about one basket of cocoons of a fine quality, which at the present price, would pay at least \$4 per day, including all the time in feeding the worms.—*Alb. Cal.*
C. M. L. A.

LACONIC ADVICE.—Mr. Hilbard, who for twenty-one years has been the President of the Northamptonshire Farming and Grazing Society, the annual meeting of which was held on Wednesday, in presenting a prize cup to Mr. J. C. Elliott, gave him the following laconic piece of advice:—"Young man, take this cup, and remember always to plough deep, and drink shallow."—*Eng. paper.*

PROTECTOR.—The whole series of furrows on an English statute acre, supposing each to be nine inches wide, would extend to 19,360 yards; and adding twelve yards to every two hundred and twenty for the ground travelled over in turning, the whole work of one acre may be estimated as extending to 20,416 yards, or eleven miles and nearly five furlongs.

Apology for Cultivating Flowers.

BY MRS. SEBA SMITH.

I deem it not an idle task,
These lovely things to rear,
That spread their arms as they would ask,
If sun and dew are here—
For simple wants alone are theirs,
The pure and common too—
The bounty of refreshing airs,
The gift of liquid dew.

And they return for every ray,
A gayer smile and look;
And greenly as the clear drops play,
They murmur of the brook;
And thus our thoughts away they lure,
Where woods and waters gleam,
And mountain airs are strong and pure,
And king the bird and stream.

Fruit, grateful things: how fondly they
The nurtured leaf outspread,
And more than all my care repay,
When from its folded bed
Some pink or crimson blossom press
To thrill me with delight,
To fill my very eyes with tears,
Its beauty is so bright,

Nay, 'tis no idle thing, I trust,
To foster beauty's birth,
To lift from out the lowly dust,
One blossom to the earth—
Where barrenness before had been
A verdure to disclose
And make the desert, rich in sheen,
To blossom as the rose. (Ladies Companion)

Early Importation of Sheep.

"A Subscriber" asks for information respecting the Sheep imported into this country from Spain, by Col. Humphrey, of Connecticut. "40 or 50 years ago"—particularly as to where, or from what flock they were obtained.

We have looked over a large number of agricultural works, but find no definite information on this subject. The most that we can learn is, that in 1805, or 1806, Col. H. imported about 100 *Merino* sheep from Spain. They were said to have originated from the same breed as those imported into this State from France, a year or two previous, by Chancellor Livingston, but differing from them essentially in their character. Those from France were longer, had straighter legs, longer necks, and bodies more barrel shaped. Their wool was equally fine, but somewhat longer, and the sheep were more delicate in constitution. Those from Spain were short legged and slab sided, with short necks heavily draped; the wool fine, but short; constitution more hardy than those from France.

If any of our readers can give the particular information desired, we should be pleased to have them do so. In the mean time perhaps the above may be of service to our correspondent.—Eus.

Post Masters

Have very generously assisted us by obtaining subscriptions and remitting money. For this they have our sincere thanks, and deserve the thanks of the community at large. We trust they will see good results from the circulation of the paper in their towns, and that they will feel disposed to continue their efforts in our behalf.

The Public Press.

We are under great obligations to many editors of newspapers who have published our Prospectus, or kindly noticed the *New Genesee Farmer*. To such we will continue to send it without asking an exchange, and if they desire it sent to a friend also, we will cheerfully add the name to our list. (Those who have not done so, but feel disposed to aid us, will confer a favor by inserting the prospectus below.)

Editors of Agricultural, Scientific, or Literary papers, who generously give us an exchange, will please accept our sincere thanks.

THE NEW GENESEE FARMER.

The Cheapest Agricultural Paper in the Union—Only 50 cents a year, (in advance.) 16 large pages monthly, with cuts. J. J. THOMAS & M. B. BATHAM, Editors. DAVID THOMAS and others, assistants. ONE HUNDRED CORRESPONDENTS.

The flattering encouragement which the *New Genesee Farmer* has received during the past year, has convinced the proprietors that the paper can be sustained in its *utmost* state, and at its *present* price; and while they express their gratitude for the assistance they have thus far received, they would now, with renewed confidence, appeal to the friends of agriculture in behalf of the Second Volume. The paper is so well known, and so highly approved, that it is unnecessary to speak of its character, further than to say, that it will not suffer by a comparison with any other paper of the kind in the United States. Each successive number has shown an increase of talent and correspondents. It has received during the past year, original communications from ONE HUNDRED WRITERS, most of whom are well known practical agriculturists. It also contains the most useful selections from other agricultural journals, reports of the markets, &c.

The object of the *New Genesee Farmer* is to advance the great interests of Agriculture and Horticulture—to benefit the community in general, and farmers in particular. Experience proves that it is well calculated to promote this object; and therefore it is the duty of every friend of improvement to extend its circulation, in order that its influence may be felt throughout the agricultural community.

The friends of *Agricultural Societies* should especially encourage this paper; for unless farmers read the subject, and get their minds interested in their profession, they will not act efficiently for its advancement.

The Societies formed last year in Western New York, and their fine exhibitions, have already given a new impulse to the cause in this section of country; and it is confidently expected that much more will be done the coming season.

The 3d Volume commenced Jan. 1, 1841.

LET All Postmasters be requested to act as agents, and remit money to the publishers.

Address, BATHAM & CROSMAN.

Rochester, N. Y.

ENGLISH MARKETS.

The latest news from England, dated 13th Dec. is of but little importance as it respects the Markets. The Money Market was said to be somewhat improved and Cotton a shade higher. The duty on Wheat was 2s 5d per quarter, and on Flour 1s 10d per barrel.

Liverpool, Dec. 2.—The Corn market keeps declining; this week's average of English wheat is 6s per qr. In Flour, duty paid, and 2s 5d in hand. Sailed India has declined 1d per lb; dry duty is maintained.

Liverpool, Wool Market, Dec. 2.—Scotch: A fair demand was felt for most classes of Scotch wool, and the demand was previously obtained were equally supported. A good spring inquiry from the United States would materially add to the business of the trade. The foreign wool market was somewhat firmer this week, and a note of sale of some of the various sorts took place at the rates of Saturday, the 21st ult.

Manchester.—The accounts received this morning from Manchester are of a more cheering character than any received for some time past. Money is coming more plentiful, and little more easy of discount, owing to the timely interference by the London discount bankers, who had taken of a great number of the bills of the foreign houses, and thus relieved the local money market. The prospect of trade were also improving. The extensive Mediterranean market, in consequence of the events which have occurred in Syria, was again somewhat in a better position, and orders have arrived from the United States, with anticipations of more and larger by the next packet.

NEW YORK MARKET—Dec. 22.

Flour, Grain, &c.—The receipts of Genesee and all other sorts of Flour through the Hudson are small. The stock on hand is variously estimated from 25,000 to 300,000 bbls. There is a constant demand and prices rather stiff. The sales of Genesee are at \$1.94 a 5 for common brands; 300 bbls in good order round and in low-sides on Saturday at \$1.96; Michigan \$1.85; heavy brands of Genesee and Ohio range from \$1.75 to \$1.75. Some sales were made of Branding Flour at \$1.50, and of Georgetown at \$1.55. Rye Flour is \$2.03 25, and Corn Meal \$1.50 per bbl. Small sales were made of prime Ohio Wheat at 107 cts. Rye closed at 34 1/2 cts. One of the last sales of Corn was at 35 cts; and Southern new at 32 cts, and old Southern is held at 35 cts; and old Southern at 32 cts. Northern new at 31 cts, and old at 30 cts. A little old command 19 1/2 cts per bushel. Jersey sold at 30 cts. There were no sales of Barley.

Money Market.—There was a pretty large business transacted at the Stock Exchange, and prices generally well sustained. United States Bank was sold at 66, buyer 20 days; Delaware and Hudson went up 1/4; North American Trust sold at 1/4; York and Albany Bank at 1/4; and Company down 1/4; Western R. R. up 1/4; New Jersey R. R. do; 1/4; Sunnington R. R. do; 1/4; Harlem down 1/4.

\$2000 Exchange on Philadelphia sold at 10 1/2; and \$12000 do. at 10 1/2 per cent.

\$2000 Indiana bonds sold at 74 for next week.

The Philadelphia Banks have notified to the parties making the loan, that they are in readiness to receive their portions of the two and a half millions, and issue Post Notes for cash.

The Richmond Whig of Tuesday says—"Money matters are tight this week, and will continue to be so for some weeks to come. Accounts will be comparatively small until the yearly reports of the Banks are made."

PRICES OF FLOUR AT DIFFERENT PLACES.

Place.	Price.	Place.	Price.
Boston.	\$5 25	do	\$5 50
Philadelphia.	4 1/2	do	4 1/2
Baltimore.	4 1/2	do	4 1/2
Richmond.	1 5/8	do	1 5/8
Alexander.	4 30	do	4 1/2
Cincinnati.	3 60	do	3 60
Washington.	4 1/2	do	4 1/2
New Orleans.	1 30	do	1 30

CINCINNATI FLOUR MARKET.

Up to December 13th, the whole number of hours sold in this market was 5,400. The drawers, generally, are making their own pork, having paid prices to the dealer for selling it for less than \$1 50, and the packers offering only from \$1 to \$1 25.

ROCHESTER MONEY MARKET.

Specie.	Price.	Specie.	Price.
Henry Notes 1/2	1/2	do	1/2
Eastern Drafts 1/2	1/2	do	1/2
Western Drafts 1/2	1/2	do	1/2
Pennsylvania 5/8	5/8	do	5/8
Ohio 5/8	5/8	do	5/8
Indiana 12 1/2	12 1/2	do	12 1/2
Maryland 7 1/2	7 1/2	do	7 1/2

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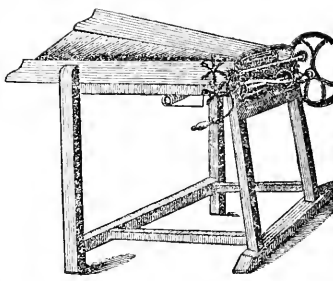
Persons with whom the proprietors are unacquainted, if requested to give a satisfactory reference, or name some person in the city of Rochester, who will guarantee the merit.

BLAWENGER & BARRY

Rochester, Dec. 1, 1840.

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ROCHESTER PRICES CURRENT.

CORRECTED FOR

THE NEW GENESEE FARMER, JAN. 1, 1841.

Commodity	Unit	Price
WHEAT	per bushel	75 cts
CORN	do	37 1/2 cts
OATS	do	28 cts
BARLEY	do	35 cts
RYE	do	50 cts
BEANS, White	do	75 cts
POTATOES	do	19 cts
APPLES, Desert	do	31 cts
" Common	do	19 cts
" Dutch	do	75 cts
CIDER	per barrel	1.00
FLOUR, Superfine	do	4.25
" Fine	do	3.50
SALT	do	2.00
PORK, Mess	do	11.00
" Prime	do	8.00
" Hog	per 100 lbs	3.50
BEEF	do	3.50
POULTRY	per pound	6 cts
EGGS	per dozen	18 cts
BUTTER, Fresh	per pound	14 cts
" Firkinn	do	10 cts
CHEESE	do	6 cts
LARD	do	7 cts
TALLOW, Clear	do	8 cts
HIDES	do	5 cts
SHEEP SKINS	each	75 cts
WOOL	per pound	35 cts
PEARL ASHES	per 100 lbs	5.00
POT	do	4.50
HAY	per ton	7.00
GRASS SEED	per bushel	1.00
CLOVER	do	6.00
FLAX	do	75 cts
PLASTER, (in bbls.)	per ton	6.00
" bulk, (at Wheatland)	do	3.00

Reddies.—After several weeks of unusual dullness in buying, we were, a few days since, favored with a full of snow, and now the gliding sleighs, with merry lads and Old Winter appear again, and cheerful again, and pure as for a "happy new year." Business has greatly revived; and, although there is, as usual on "pay day," no complaint about the scarcity of money, we have great reason to be thankful that there is no complaint about the scarcity of bread.

WHEAT is now brought in to a considerable extent, and price has advanced a trifle since our last. Flour remains scarce.

Pork still comes in most abundantly, and sells at a rather better price than last month. The largest sized hogs are sold at \$1 1/2 per 100 lbs.

Butter has been very fine and abundant during the holidays, and sold at 14 cts per lb. Eggs are scarce and sold at 18 cts per dozen. Apples have paid as high as 31 cts per dozen for them during the past week.

Corn is a scarce article, but the price is not yet established. \$5 per bushel has been paid for some small lots.

THE GENESEE FARMER.

AND GARDENER'S JOURNAL.

I. B. BATEHAM, Proprietors. } VOL. 2. ROCHESTER, FEBRUARY, 1811. NO. 2. } JOHN J. THOMAS.
F. CROSMAN, } M. B. BATEHAM, Editors.

PUBLISHED MONTHLY.

TERMS.

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The Editors.

In order that our readers may understand who are responsible for the different editorial articles appearing in this paper, we mention that those marked thus * are written by J. J. THOMAS, Macedon, and those marked by DAVID THOMAS, Aurora. M. B. BATEHAM, Rochester, is the publishing editor, and is responsible for the selections, notices, and all articles not marked.

To Correspondents.

Our acknowledgements are due to several new and valuable correspondents whom we shall be happy to hear from frequently. At the same time we hope our old friends will not forsake us. We are glad to read our correspondents generally willing to *sign their names in full*. Should esteem it a favor if they could all do so, especially when relating facts or experiments.

The First Volume.

We are almost daily asked if Vol. 1 of this paper can be had; and therefore state, that it is furnished, stitched in a paper cover, for 50 cents. Postage, within the state, 12 cents—out of the State, 18 cents.

Our Success.

Thus far, fully equals our expectations; and we take it as a method to return thanks to the numerous Post Masters, and others, who have generously aided us by sustaining subscriptions or remitting the same.

We have not time, nor do we deem it necessary, to send receipts to all who remit money; but do so, when

desired. If the papers arrive, they may know that their letters reached us; but if they do not arrive within a reasonable time, we hope they will notify us.

Careful persons are employed to enter the names and send the papers, and great pains are taken to have it done correctly. We hope and believe there will not often be cause for complaint in future.

Post Masters and agents in Canada, who wish to send us instructions respecting the direction of the papers, are requested to direct their letters to the Post Master at this place; otherwise we are subjected to postage.

Post Masters and Agents are particularly requested to write the name of the Post Office, County, and State. It is sometimes almost impossible to decide what State the place mentioned is located in.

Discount Money.

Bills on solvent Banks in this, and the Eastern States, are at par with us. Canada, Pennsylvania, and New Jersey, are about 5 per cent. discount.—Ohio, Indiana, Kentucky, and Illinois money, is about 8 per cent.; and Michigan is 12½ per cent. discount.

We hope our friends at a distance will take pains to send us the best money they can obtain. We do not *refuse* any of the above, when sent us free of postage, and nothing deducted for commission; but the amount paid by us for discount during the year, is a serious item.

Subscribers in Canada.

Should remember that their Postmasters cannot frank letters further than the lines; so that we are compelled to pay postage on all letters coming by mail from there. This we do not mind, if bills not under \$4 are remitted; but on small bills, the postage and discount together, are too great a sacrifice.

Subscribers residing near the places mentioned below may pay their subscriptions to the persons named.

Kingston—JOHN CLEIGHTON, (Chron. & Gaz. Office.) and CHARLES HEATH.

Port Hope—D. SMART, Post Master and President Agricultural Society.

Toronto—LESLIE & BROTHERS, JAMES F. WESTLAND, and GEORGE LEMIE.

Hamilton—SAMUEL KERR, Merchant.

London—JOHN NORVAL, (at News-Room.)

In addition to the above, Postmasters and friends of the cause generally, are requested to act as agents. BATEHAM & CROSMAN.

The Annual Meeting of the Agricultural Society occurs to-morrow, but it is thought that nothing more will be done than to elect officers. The arrangements for the coming season will be deferred till it is decided whether the Legislature will grant any aid.

Hints for the Month.

Every farmer knows, that any suggestions for work at one time during winter, are generally applicable at any other time. We believe, therefore, that the best hint we can now give, is, just to turn back to the two last numbers of our paper, and read again what is there written. We do not of course expect you will find any thing *new*, especially if you are good farmers, (as we hope all our readers are, or soon will be,) but good farming, remember, does not depend so very much in finding out new things, as in making a good use of what we already know. So then, gentlemen, we hope you will excuse us, if we tell you pretty often some of these old things, if we can only help you to practice them.

Just remember what we said,

1. About feeding cattle *regularly*, so as to prevent their fretting their flesh away;
2. Of giving them a *sufficiency* at all times, for the same reason;
3. Of providing good shelter for them;
4. Of supplying them constantly with good water;
5. Of keeping them rubbed clean, and plenty of good warm clean litter under their feet;
6. Of feeding them very often with salt;
7. Of cutting their fodder with a straw-cutter;
8. Of mixing their dry food with roots; and
9. Of keeping their stables ventilated, but excluding the cold wind from entering at the smallest crack.

Lact pigs, sheep, and all other animals, be fed very much in the same way, (except that the sheep need not be rubbed or curried, nor the pigs kept in stables, though we think there is commonly a very great waste, both in the feed and the flesh of pigs, by suffering them to be so much exposed to the weather as they usually are.)

There a few other things we wish to remind our friends of during this month, such as trimming their thick-topped apple trees—procuring grafts of the *very best* fruit they can find, for such will grow quite as well as poorer—making their grafting plasters—pruning their hardy grape vines, before the bleeding season commences,—the sooner the better—treading snow around young fruit trees, to prevent the mice from eating the bark, and destroying them. Also, cutting up the wood for seasoning, and for summer use; repairing tools, &c., as hoes, ploughs, rakes, wagon racks, barrows, cultivators, forks, shovels, rollers, as well as repairing and oiling harness; looking over apples in cellars, and removing the partly decayed; and keeping their eyes open to all things which need doing, and both hands ready at all times to do them.

And now, *one thing more*, and that is, let every farmer resolve, and resolve effectually, to conduct his farming operations a little (at least) better this year than he has ever done before. Cannot he do it? It is well worth trying, at all events, and if gone about in earnest, will be pretty sure of success.

Damp Stables.

A correspondent of the Farmers' Cabinet states, that on taking possession of a newly purchased farm, his horses became poor, diseased, and incapable of labor; his cows became sickly, their milk diminished, their butter became bad, four lost their calves, two died of scours in spring, with other attendant evils. The dampness of the stable, which was built under large trees in a low situation and with a northern aspect. It was immediately torn down, and another erected on a drier situation, when, as was expected, all these evils vanished at once.—Stables made of stone, are more liable to this difficulty.

Cheese are preserved from the fly by a coating of pyroligneous acid.

The Sponge Apple.

Some years ago, we set a graft on a young apple tree in the orchard, which now bears abundantly; and the fruit has become a general favorite; but the name under which we received it has been lost, and if any correspondent will restore it, we shall be much obliged. We subjoin a description. On account of its shriveling when long kept in an open bin, we gave it the *provisional name* of the sponge apple—to be expunged however, when the right name is known.

Fruit above the middle size, inclining to oblong, but broadest near the base, slightly ribbed, some, three inches deep and three and a quarter in diameter. Eye in a narrow depression, closed. Stem very short—less than one third of an inch, in a broad but very shallow irregular cavity. Skin green, streaked and checkered with very pale red on the sunny side. Flesh greenish white, extremely tender, tart but excellent.

We have seen no apple that this resembles, in shape, in color, or in texture. The singular tenderness of its flesh reminds us of the Bellflower; but they differ in almost every other particular. The Sponge is more than five times as productive, and generally fair.—Like the former however, it should be carefully hand-picked, and not allowed to fall from the tree, as it is apt to get bruised. It appears to keep well through the winter; and if barrelled or buried, we have no doubt of its remaining fresh and unshrivelled till spring.

The Napoleon Pear.

In years past, we endeavored to cultivate fine winter pears; but when the trees came into bearing, it was found we had only been collecting trash. In every instance the fruit was left for the pigs; nothing fit for human life to touch, was amongst them; and when asked if there were not good *winter pears*? we have had to answer: we have read of them, but never saw one.

Well, at last we have found one; and some may be gratified to hear it. From a small tree marked Napoleon, in bearing for the first time, we secured two pears; and about the middle of December, they were mature. In some respects they differ from Lindley's description, and some doubts still hang over their identity; but what follows, was exact:—"finely [the skin] changes to a pale green, when the flesh becomes very melting, with a most unusual abundance of rich agreeable juice." They were the most juicy pears we have ever tasted.

We shall notice here, only one of those discrepancies: Kenrick says "It ripens with us in September." Lindley says "Ripe the middle of November, and remains in perfection several days." Ours ripened a month later.

Vat or Box for Boiling Sap—Inquiry.

MESSRS. EDITORS—Having understood that there had been a Vat or Box used for boiling sap in making sugar, and wishing to see a description of it, I thought of making inquiry through your valuable paper; hoping you, or some of your subscribers, might give me the required information. I wish to know what would be the most convenient size and depth; how it is made, with a board bottom covered with sheet iron, or with sheet iron bottom alone? If the latter, what would be the easiest way to make it water tight? If the former, will the sap boil equally as well? Also, whether they will take in sap as fast as a caldron kettle holding the same quantity, and the probable expense of one?

I would also like to know the quantity of Time, they need required to the acre, to seed with Time, alone, for mowing.

By answering the above, you will much oblige

A SUBSCRIBER.

Watering Places—Hoof Ail.

MESSRS. EDITORS—In an editorial article in the December number of the "Cultivator," page 1-1, are remarks on the subject of watering cattle in winter; some of which appear to be objectionable. The sentiment to which I refer is, "that it is no disadvantage to cattle to go a suitable distance to water, but rather a benefit, as promoting circulation in the feet, and thus preventing diseases of the extremities."—The same idea is advanced in the February number of the same paper, page 22. And putting both articles together, we should conclude the "suitable distance" for cattle to travel for their water in winter, was from fifty to one hundred rods. And the advantage set forth is the *exercise*, which prevents what is called the hoof ail.

"Now it strikes me very forcibly," as the judge says, that this course, both in theory and practice, is, to say the least, somewhat objectionable. It is the opinion of many, that cattle should not be compelled to go out of their yard for water; and the following among other reasons are adduced. If water cannot be obtained by cattle without travelling one fourth of a mile, they will many times suffer exceedingly for the want of it, rather than go so far for it. If good fresh water can be had by them without going out of the yard, they will drink very much *often* than in the other case, especially in cold weather. Again. The oldest and strongest cattle will generally go first to water. When they have drank, they return, and on their way meet others in the narrow snow-path, and of course drive them back. In which case, the youngest and most feeble of the herd will have much trouble and vexation in obtaining water at all. And again.—The amount of manure which is dropped, and for the most part lost, in such case is very considerable in the course of the winter; and it is by many farmers esteemed a matter of no small importance, that *all* the manure should be saved. Some say, even, that they may as well waste the food of cattle as the food of plants.

And besides, when cattle go to a spring to drink, especially if the snow is deep, there will generally be great difficulty in reaching the water on account of the bank of snow and ice, unless they step into it, which cattle are very unwilling to do. I have seen many watering places where cattle, in order to obtain a drop of water, were obliged to get down upon their knees, and even then obtain it with the greatest difficulty.

Neither do I believe the *exercise* of this travel of cattle a considerable distance to water, is of any advantage in preventing the hoof ail. But I am very strongly inclined to the opinion, which was advanced some time since by Gen. M. Brooks, of Mount Morris, and also, by Heman Chapin, Esq., of East Bloomfield, to wit, that the "foot ail," or "hoof ail," as is called, is the result of the *frosting* of the feet. And it would seem more probable that the feet would become frozen by being first wet or covered with mud, than if they were kept dry and clean.

I believe, therefore, most sincerely, that if cattle are kept in a well enclosed, comfortable yard, with open sheds, or hovels even, for their protection from storms, where they can have free and uninterrupted access to good water, and plenty of salt; the yard kept constantly littered with straw, so as to make it always dry; and the cattle put up every night in a stable filled to their knees with the same article, they will *never* have the "hoof ail."

I know that with many, a very strong prejudice exists against wells for the supply of water for cattle.—And probably, a stronger prejudice prevails against the labor and trouble of drawing it. But the expense of thus furnishing water for cattle in winter is compara-

tively trifling; when, by an under-drain or any other contrivance, running water can be conveyed into the yard, so much the better. And in many cases this may be done with very little cost. But where this is impracticable I would pump water for all my cattle, horses and sheep, rather than compel them to go abroad for it, even though the distance did not exceed thirty rods.

There are several farmers of my acquaintance, whose cattle, if they have any water at all during the winter, are obliged to travel from one fourth to three fourths of a mile for it, and when they arrive at the spot where water can be found it is only to be obtained by them through a hole cut in the ice, which may be from six to eighteen inches in thickness.

I have a good spring of water about sixty rods from my barn, and for two or three winters drove my cattle to it every day, especially in cold weather. But since I have dug a well contiguous to my cattle yard and put a pump in it, I find much less trouble to furnish water for my stock in the yard than it was, even to visit the spring every day to see that it was attainable there.—And besides, there is much less quarreling among the cattle, and it is so much more comfortable for them to drink from a trough conveniently situated, that I would not be without this appendage to my barn yard, even though it should cost me a hundred dollars.

And moreover, all the manure of the whole herd is in the yard, intermixed with the straw and litter thereof, in good condition for spring use, which is a matter of no small importance.

These, and such like, are the reasons why I am opposed to the practice of sending cattle from fifty to a hundred rods for water in winter, expressed, however, with due deference to the opinions of more experienced herdsmen.

WINTER PROTECTION.

I am aware there are many farmers who think it a matter of no consequence, whether our domestic animals are afforded any protection from the severity of the winter. It is probably true that most of them will *live* through the winter without it, if they are well fed. But are we not taught a lesson on this subject from the habits of wild animals? Not one of them, as far as my recollection extends, is without, or does not provide himself with comfortable shelter or home for the winter. Are we not told, also, from authority which should not be disregarded, that the merciful man is merciful to his beast? And where is the farmer, who, by a profusion of the blessings of a merciful Providence is made comfortable, can be unmindful of his domestic animals, from which he receives his food, and his raiment, and afford them that protection from the chilling blasts of winter, by which they are rendered comfortable not only, but are thereby rendered much more profitable.

Another very great advantage of stabling cattle, is the saving of feed from waste. I have seen farmers, otherwise respectable, throw their hay upon the ground when covered with mud and filth, for the food of cattle, horses and sheep, all in the same yard. In which case one half, at least, of the hay, was trod into the mud and water. But where cattle are stabled, each having his mess by himself, and then the younger and weaker animals unexposed to the encroachment of the older and stronger, consume their food with peacefulness and contentment, without annoyance and without waste.

And still another advantage to be derived from this course of a plentiful use of straw every day in littering the yard and stable is, the animals are not only kept dry and comfortable, but the straw is all turned to a good account. There are many farmers who seem not to know what to do with their straw. Year after year it is suffered to accumulate in immense piles

about the barn, till it becomes a nuisance. But if it is daily scattered in the yard for the cattle to pick upon between the day, and used for bedding in the stables, it will thus become impregnated with the liquids of the yard and stables, and mixed with the animal manure thereof, and thereby the quantity of manure for spring use will be greatly increased. By such a course a small stock, say of fifteen head of cattle, seventy-five sheep, and three horses, will supply three hundred loads of good manure for the corn and potatoe crop the ensuing season. The straw, thus spread frequently in the yard, to some extent, is eaten by the stock, the balance absorbs the juices of the yard, becomes saturated therewith, and its value thus rendered four fold greater than if it were applied in its dry state.

Yours &c. W. PARSONS.

Thorn Hill, near Lockport, Dec. 1840.

Hoof Ail—Its Cause and Cure.

Messrs. Editors—I observed in one of your papers, an inquiry respecting the cause of the disease called Hoof Ail, in cattle; and having paid some attention to the subject, I will cheerfully give you the result of my observations and the prevailing opinions here, which you are at liberty to publish, if you think they will be of service to any of your readers.

In the winter of 1836-7, this disease made great ravages among the cattle in this vicinity. Freezing of the feet was at first assigned as the cause; but many proofs to the contrary soon led to the abandonment of this opinion, and *ergot* was substituted as the mischievous agent.

I believe it is an opinion well established, that *ergot*, of rye, or *Secale cornutum*, has given rise to gangrene in the human species. This circumstance and the similarity which exists between it and the disease under consideration, afford good reason for the belief that the causes may be similar.

Ergot may sometimes be found in large quantities in June or spear grass—whether it differs in its chemical properties from *ergot* of rye, I am not able to say, but presume it does not materially. This grass, as is well known, is apt to run out Timothy and clover, consequently it grows in excess in old meadows, and to the *ergot* growing on it, the disease is attributable. I have made many inquiries, but never found a case occurring where the animal had not been fed on hay containing it.

I will mention a few facts in confirmation of this opinion:—Mr. W. had 50 head of cattle fed upon hay mown from old meadows—the greater part of which was June grass. Only one of the 50 escaped the disease. A tenant upon the same farm, kept his cattle within 20 or 30 rods of the preceding, but fed them upon hay of marsh grass, and they escaped the disease. Mr. C., on the adjoining farm, had some June grass among his hay, but not so much as W. Only two or three of his cattle were affected, till the latter part of April, when, being out of hay, he procured some of W.; and in a few days five of them had the disease. Another neighbor, Mr. B., had wintered his cows well, but in spring, being out of hay, he also procured some of Mr. W.; and before long, all that had eaten it became affected with Hoof Ail. Mr. K., on an adjoining farm, fed his cattle on straw, and none of the disease appeared amongst them. Dr. Stimson says he fed his cattle on hay containing a large proportion of June grass. Good attention was given them, but many became affected with the disease; and it continued to increase until he stopped feeding the hay, and gave them turnips and other food, after which no more Hoof Ail appeared.

I could mention numerous other cases, affording conclusive evidence that this disease is caused by *ergot*.

got on June grass, but I fear it will make this communication too long to enumerate them. I will remark that in this section of country, this grass had an abundance of *ergot* growing upon it last season; and consequently we may expect to see cattle affected with Hoof Ail again this winter. Indeed it has already made its appearance amongst my father's stock. He commenced feeding a lot of hay found to contain *ergot*, to some calves, on the 2d or 3d of December; and on the 12th, 9 of them had the disease. We immediately changed their food, and cut off the points of their hoofs, so that they bled freely. They are now doing well.

This treatment generally effects a cure, unless the disease has been of long standing. The disease rarely affects the fore feet. I have never seen an instance, but have heard it asserted that it will sometimes occur. Respectfully yours, N. St. George, U. C., Jan'y, 1841.

From the Cultivator.

Cure for Hoof Ail.

Messrs. Editors—Perceiving in your last number, an inquiry respecting the Hoof Ail in cattle, I am happy to have it in my power to communicate one which never fails in afflicting a cure in two or three days.—Blue vitriol, finely pulverized, and applied to the diseased part of the hoof, once a day for two or three days, is all that is necessary. In the case of a cow of mine, one application was sufficient, and I presume would generally answer the purpose. The disease here is called by some of our farmers, "*fouls*," and by others, *hoof ail*. If the case alluded to by your correspondent, is the same disease, you can depend on my remedy. Yours very respectfully,

H. E. HUBBARD.

Middleton, Ct. 1840.

Period of Gestation in Cows.

One of the most satisfactory experiments relating to the subject, on record, is the one made by Earl Spencer, and the particulars of which are given in the second number of the English Agricultural Society's Journal.

The table given, contains the results in the case of seven hundred and sixty-four cows, and the following statements abridged from the paper, will exhibit some of the most important of the details.

First. It appears that the period of gestation varied from 220 days to 313 days; or no less than 90 days.—Lord Spencer was, however, unable to rear any calves produced under 243 days. All under 260 days, and over 300, he thinks are decidedly premature, or irregular.

Second. As 314 cows calved before the 283d day, and 310 after the 285th day, the average period of gestation must be considered as between 284 and 285 days; although the time stated in the work on cattle by the London Society, states it at 270 days.

Third. It appears, that omitting those considered as premature or irregular, the cows whose period of gestation did not exceed 285 days, produced 223 cow calves, and of bull calves 234; while those whose period exceeded 286 days, the cow calves were only 90, and the number of bull calves was 152. This certainly gives some support to the opinion prevalent among farmers, that when a cow exceeds her usual time, she produces what is a bull calf.

Fourth. There were 7 cases of twin cow calves; 5 cases of twin bull calves; and 11 cases of twin cow and bull calves. Earl Spencer has never had a case in which the sexes were different, in which the heifer was a breeding one; they have uniformly been what are termed *frece martins*. The cattle of which the above record has been kept, are the pure improved short horn breed, and of the finest herds in Great Britain.—*American Farmer.*

From the American Citizen.

Our Wheat Interests—A Public Meeting.

We have read, with attention, the proceedings of the Convention of Tobacco Planters of the United States held last month, in the city of Washington.—We published an outline of the views expressed, and the measures adopted, by that convention, in our last number; and we ask all our readers to examine them carefully. It seems to us that they ought to produce a strong effect upon the public mind, in all the wheat growing States—that they ought to awaken us to a sense of our stupid neglect of the greatest outward interest which the Creator has bestowed upon us; and that we

should feel excited to confer together henceforth often and extensively, to promote this interest.

We believe the grain growing interest in the United States is, now, under all the embarrassments besetting it, six or eight times greater than the Tobacco interest, and can be soon extended three-fold by just and prudent means. This interest connects itself with the great tide of life in all countries, more vitally and much more beneficially than the Tobacco interest can. Shall we not then labor to cherish it by all the fair means in our power? It is not enough to sow, and reap, and grind, the finest wheat known to earth's broad bosom, with labor and skill, in all the requisite processes of tillage and machinery and manufacture, and send the grain of the world—and to multiply railroads and canals, and vehicles of transportation upon them, with a rapidity transcending the creations of fairy land; but we must actively apply our common sense, and that extensive knowledge of facts which we now possess, or can easily obtain, to the task of extending the markets for this most essential of the necessities of life.

Solomon says, "As goods are increased, they are increased that consume them." This truth is demonstrated by the experience of all ages. And the facility with which wheat is raised in this and the neighboring latitudes, in a wide belt across the Union, is the chief cause of the rapidly augmenting population, everywhere working the soil in these regions. But we should not be content with this source of our increasing numbers, wealth and strength. There are frequent convulsions between all civilized nations, and these have, within a few years, been extended beyond all former precedent. The United States are coming into close contact with all the world. And in the trade of the world, surely the nations which furnish the greatest supply of the things most essential to the subsistence and comfort of human beings, may, with no extraordinary displays of practical wisdom, enjoy a fair share of the benefits of the world's trade. We do not now, and never have enjoyed such a share. Let us strive to obtain it.

We import an immense amount of various articles from Great Britain annually,—of which the value has been chiefly derived from the industry of her subjects. In this way her industry supercedes ours to a vast extent. And these importations are chiefly consumed in the wheat growing States. Yet she will take none of our flour, the article on which our industry is chiefly laid out. Shall this state of things be perpetuated? We have her interests as much in our country as she has ours in hers, and perhaps more; for the high price of her bread stuffs, always artificially exorbitant to favor the landed interest, will give us all her hungry laborers and artisans, amounting to many millions. Oh that they could vote! as advocates for the admission of our flour into her ports, upon reasonable terms. We think her attention, and the attention of several of the continental nations of Europe should be called to this interesting subject, in a new tone, to be backed up by suitable legislation in Congress. But the interests of the people are rarely attended to without the interference of the people. The people must meet and discuss this concern in all its various bearings. They must gather facts and publish them; they must investigate principles and comprehend them; they must petition the national government for its interposition, and show how that interposition may be effectual.

In this most necessary movement we ought to feel no restraint, and Congress should feel none, from the trifling compromise entered into a few years ago. The Tobacco planters and the Cotton Planters suffer no restraints on this ground, to deter them from pursuing such measures as their peculiar interest may seem to demand. Why should we? we would not resist the law, but we would modify it.

Nothing is needed, as we fully believe, to place the vast wheat growing interest of our country on its just foundation, but true light and concerted action among the men of the wheat growing States. We ask our intelligent farmers, our well informed and sagacious millers, our observing flour merchants, our enterprising and exact owners of ware-houses, and lines of transportation, and all others interested in the prosperity of the country, and instructed on this subject, to collect the facts within their means of knowledge, and lay them before the public, with such suggestions of policy as they think wise and prudent, for the people and the government to adopt. We shall be happy always to publish, and give, as far we can in our paper, currency to their statements and reasonable views. And we would earnestly advise, that a meeting should be speedily called, in this city, to consider and discuss this subject; and to recommend a convention of delegates from each of the wheat growing States, to be

held at an early day next Spring, somewhere in the State of Ohio; at which the proper policy to be pursued in promotion of the wheat interest, should be matured, and further measures to render that policy effectual, should be originated.

Our Trade with France.

It appears from a recent table, published in the N. Y. Herald—a paper which strongly advocates free trade—that there was imported into the United States from France alone, in the year 1839, \$32,124,465 worth of articles *free of duty*—nearly one half of this amount was in silk goods. The articles imported from the same country, on which a duty was paid, the same year, amounted to little more than ten millions of dollars.

Grand total of imports from France, in American and foreign vessels, for the year 1839, \$32,531,321
Grand total of exports to France from the U. S., in American and foreign vessels, the same year,

18,338,854

\$14,192,467

Thus leaving a balance of imports over our exports against us, with France alone of more than *fourteen millions of dollars* in one year, or about one million more than the whole export of cotton to France the same year.

Yet, strange as it may seem, the advocates of free trade argue that this same unshackled commerce with France must be continued, lest France should take it into her head to go to India or Egypt for the supply of cotton. The same paper which gives the above statistics, urges, as an argument in favor of this free trade, the fact that we import more of the precious metals from France, than we export to France. So much the worse for us, because our debt is thereby only increased. If this debt is not secured by the Venetian bond of old—the pound of flesh—*State stocks*—the life's blood of children yet unborn—are sold in France and England, to pay all this excess of importations, no less than for the trifling sums in coin imported to bolster up the United States Bank, or to help ruin a new State, who, mocking all the precious lessons of experience, prefers a fevered and sickly adolescence to the simplicity of a healthy childhood—the sad precursor of both moral blight, and physical imbecility and decay.

S. W.

New Agricultural Papers.

Within a few months past, we have received about half a dozen new agricultural papers, most of them published in the Western States. We rejoice to see this evidence of the increased taste for such reading, and expect the time will soon come when no respectable farmer will be willing to live without an agricultural paper. We hope these new papers will all be well sustained; but we apprehend that some of them will seriously interfere with each others success.

"The Western Farmer," is the title of a small semi-monthly paper published at Detroit, Michigan, by Josiah Snow—\$1 per year. The first number was issued January 1, and contains a large amount of statistical and other useful information relating to agriculture and horticulture, mostly original, (but some borrowed from our columns, and the credit accidentally omitted.) We think friend Snow should have chosen some other title, as there was already one or more papers with the same or a similar name.

"The Union Agriculturist," is an excellent new paper, published at Chicago, Ill., as the organ of the Union Agricultural Society. It is neatly executed and appears to be ably conducted.—Terms, \$1 per year—semi-monthly.

"The Western Farmer & Gardener," is a continuation of the Western Farmer, at Cincinnati, Ohio.—The 2d vol. commenced last October, and appeared in a new and improved form, with an able writer on horticulture as co-editor. It is published monthly, in pamphlet form, 24 pages, stitched with a cover—\$1 per year.

"The Agriculturist," is the title of a large monthly paper commenced January 1, at Nashville, Tennessee. It is the organ of the State Agricultural Society; is edited by three gentlemen, and gives evidence of a good degree of talent.—Terms, \$2 per year, 24 pages, monthly.

"The Indiana Farmer," is a small but useful paper, published at Indianapolis, by our friend, J. S. Willets, formerly of this State—monthly, 50 cents per year.

"The Practical Farmer & Silk Cultivator," published at Harrisburg, Pa., might be a pretty good paper, if the editor was a little more careful or courteous. In one number of his, we observed three articles in succession, borrowed from the New Genesee Farmer without one word of credit.

"The Farmers' Gazette," is a good little weekly sheet—commenced last September at New Haven, Ct.—\$1 per year.

"The Yankee Farmer," published at Boston, Mass. by C. P. Benson—S. W. Cole, editor, is one of the most interesting weekly agricultural papers extant.—The new vol. commenced January 1, much improved in appearance and substance. Arrangements have been made for obtaining monthly agricultural reports from different sections of the country, respecting the crops and the markets, &c.—Terms, \$2 per year.

"The New England Farmer," is one of the oldest and most respectable agricultural papers in the Union. It is published weekly, at Boston, Mass.—\$2 per year. (We have seen it stated that some change has lately taken place in the editorial management; but as the paper has failed to reach us for some weeks past, and we cannot tell what the effect has been.)

Sore Throat in Hogs.

Messrs. Editors—Can any of your correspondents furnish a cure for sore throat in hogs? A number were lost by myself and others last summer; and all remedies used were ineffectual. The throat and head were swollen, food was refused, and in about forty-eight hours from the commencement, grunter would grunt his last. SAMUEL DOUGLASS.

Whitehall, Ohio.

Causes of the decay of Turnips.

Messrs. THOMAS & BATHAM—The following is submitted to the opinion of all that are interested in the inquiry made in the first number of the present volume of the New Genesee Farmer, which is for the cause of the decay of Ruta Baga Turnips.

I have come to the conclusion that early sowing in warm seasons, will lead to the true cause. When turnips are forward in the season, they fail for want of sufficient moisture during the extreme warm and dry weather, which effects the heart or centre of the turnip and commences the decay, which first appears by the top turning yellow when the outside appears sound and healthy. This effect is produced on large turnips when small ones will escape. Another cause may sometimes be observed. After the turnip is nearly matured, wet weather will produce a new life and cause them to crack open, and during warm weather, water standing in the crevice will cause the decay.

It may be well to state that the turnip and cabbage tribes, flourish best in a climate some thing cooler than

the summer in this section, and that warm, dry weather is equally injurious to both. Therefore the time of sowing should be delayed as long as possible, and have them mature before the winter too nearly approaches, unless some is wanted for early use. W. R.

Fredonia, January 11, 1841.

"The Burlington Silk Worm Frame."

We have received three numbers of the "Burlington Silk Record," a small paper, "issued monthly without charge, to all persons interested in the silk business, for the purpose of opening a cheap channel of communication, to extend among them a knowledge of the Burlington Silk Worm Frame, of the Burlington Filature, and of the Editor's having made it his business to raise and keep for sale the choicest kind of Silk Worm Eggs, as well as to stimulate and foster the extension of the Silk Culture in the United States. It will be sent by mail to such as write for it, free of postage. Address, EDMUND MORRIS, Burlington, N. J."

We copy the following article from the Record, setting forth the advantages of these Frames. We will give some description of them next month.

The No-Cleaning System.

We believe that all silk culturists have found the business of producing silk perfectly certain and manageable, up to the third moulting of the worms.—After the fourth moulting, they increase so enormously in size, and discharge so great an amount of excrement, that in a large establishment it seems impossible to preserve the proper degree of cleanliness, even when many hands are employed at cleaning, as the operation must be performed every three or four days. This great discharge of excrement, added to the surplus foliage which will accumulate more or less, all mixed in with the bodies of the dead worms, speedily generates putrefaction, which causes the death of thousands more, from the fatal impurity of the air which is constantly rising up from below. The books of European writers are filled with cures for diseases thus generated, while not one has thought of suggesting any other preventive than that of cleaning. They have none of them thought of going back and making a fresh start from the beginning, by using such fixtures as will remove the cause of these diseases. Herein we believe the grand mistake has been made, and it remains for American ingenuity and perseverance to demonstrate that the whole system of feeding must be changed, in order to accomplish any good results with the least approach to absolute certainty.

On the Burlington Frame, the worms are placed at the difficult period between the third moulting and spinning, in such a manner that all these three elements of putrefaction, the excrement, the chippings of the foliage, and the sick and dead worms, are completely got rid of by being riddled out at the bottom of the frame. Whatever proportion of these three does not fall through, is exposed to a continual current of air passing upward, which evaporates so large a portion of the moisture remaining in them, that the little which is left is too small to be injurious. The accuracy of this has been proved by repeated trial, and by different gentlemen who have used the frame. Indeed the construction of the frame demonstrates it. We tried and proved it ourselves, on a crop which produced five bushels of beautiful cocoons, without losing three per cent. of the worms; and a friend in New York, who fed on the same principle, did not lose even three per cent., and from two ounces of eggs gathered twenty six bushels of cocoons. He did not clean his wormcase after being placed on the frames, between the third and fourth moulting, nor did we.—The saving of labor and expense was very great, and the lives of all our worms were insured, and that is the great point—that we shall succeed in making every worm spin a cocoon.

To ascertain the exact quantity discharged by a worm after the fourth moulting, we collected and weighed the droppings, and found that 1600 worms in 24 hours discharged two ounces of clear excrement, which fell through the frame to the roof below. A considerable quantity was intercepted by the straw being spread too thick on the frame. This makes the weight from 800 to be one pound; from 80,000 ten pounds; and from 800,000 one hundred pounds, (or for ten days, half a ton!) No person whose opinion is of any value, will be weak enough to argue for a

moment that there is no object in getting rid of the enormous amount of filth; and few can be found unwilling to acknowledge it a most important advantage. Now our Frame throws off the whole of this dangerous discharge of dirt, instead of confining in continued contact with the worm, where it becomes the fruitful parent of disease and death. We have tried the feeding upon solid surfaces in a large way, and give it as our decided conviction that worm feeding can never be carried on profitably in that mode, on a scale large enough to be worthy of a capitalist. It may do in a small way, where the greatest success will never amount to much, while even then there is continual danger of a total failure. The next year will prove much in favor of the new system of feeding, as many large establishments will adopt it. Silk can thus be made at a low price, and the crop will moreover be a certain one—and no one will assert that it has ever been any thing like a certain one so far. The shelves and hurdles must be laid aside, the new system must be used, and reeled silk can be made for a dollar and a half per pound.

E. M.

For the New Genesee Farmer.

Barn Cellars—Protection for Cattle, &c.

MESSRS. EDITORS—Many writers for agricultural papers, have given descriptions of farm buildings, means of protection for cattle, sheep, &c.; but they have, for the most part, been on so large a scale as to be of little benefit to the common farmer. Those of your readers who have taken the Genesee Farmer from its commencement, can call to mind with what interest they read the glowing account of Ulmus describing his Grand Island farm; his oxen, the manner they were sheltered and fed; his plan of a barn and stables, as given in the Cultivator. Also, the numerous articles of L. A. M., of Tompkins Co., on protection for sheep; and A. B. Allen's description of his hog pen. These were all interesting articles; but not one of a hundred of your readers, have ten yoke of oxen to shelter, or need a hog pen to accommodate fifty hogs, or hay barns to protect eighteen hundred sheep.

The most of your readers are small farmers, like myself, who have only from one hundred to one hundred and fifty acres of land. These are the men who need to be urged to afford protection for their cattle and sheep, although few in number. When you can bring the ordinary farmer to cultivate his lands in the best manner, to own no cattle, hogs, or sheep, but those of the finest order, and afford suitable protection to all these, the great object of agricultural papers will have been accomplished.

Having built a cellar under my barn, and a stable attached to it, which I think answers a good purpose for a small farm, I propose giving a description of it for your paper, in hopes that so far as the plan is a good one, it may meet with the approval of my brother farmers, and may perhaps contain some reasonable suggestions to those about building.

When I came into possession of my farm, a sufficient number of buildings were upon it; but the barn, built some forty years ago, in the usual style of barns in that early day, had but little accommodation for cattle. As usual, it was divided into three parts, the bay, floor, and stable. The ground was slightly descending, so that the end of the barn, in which was the bay, was near four feet from the ground. Having supported the corners on props, I dug out the earth to a sufficient depth under the barn and barn floor, and built a substantial wall, enclosing a space of thirty feet square. I then built an addition of sixteen feet on the end of the barn, for stables. The floor of this stable is three feet lower than the barn sill. Across this stable, adjoining the barn, is an alley of four feet in width, and from this alley is a passage to the cellar, and by the side of the alley is the manger, as seen in the annexed plan. My stable will accommodate nine head of cattle, arranged according to their strength and pugnacious propensities. I have tried different methods of fastening cattle, and I prefer a chain round

the neck, fastened by a ring and key. This chain passes through a small wooden bow, which slides up and down a stanchion.

My feed for cattle depends somewhat upon my success in root culture. I am now feeding apples and potatoes, and find them answer a good purpose, although I prefer mangel wurzel and carrots, to any other food for cattle.

It may be useless, in this day of improvement, to enumerate the benefits of stabling cattle; but I consider, as not the least of these, having them at command, where they are handled and made docile. In short, the benefits are manifest, open and confessed by all; but who feels an interest sufficient to go and do likewise? Yours, &c., MYRON ADAMS.

Ontario county, January 18, 1841.

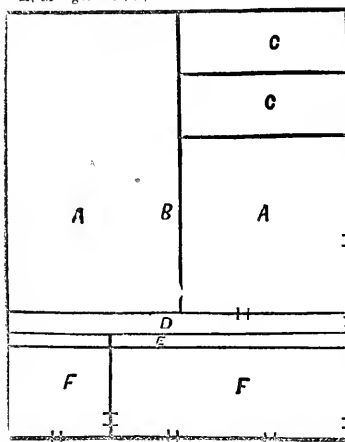
The following plan will give the reader a more definite idea of the arrangement:

A, A, Cellar with a partition B.

C, C, Bins for potatoes, apples &c., under the barn floor, filled by driving on to the floor and opening trap doors.

D, Alley between the cellar and stables.

E, Manger. F, F, Stables.



Scraps,

CONDENSED FROM EXCHANGE PAPERS.

GEORGIA SILK. The Macon Telegraph says, "At a late term of the Inferior Court in this county, one of the Judges appeared on the bench in silk stockings, silk handkerchief, &c., made by his own family or some of his friends, the production of their own cooperies. The next day another of the judges, A. E. Ernest, Esq., appeared in a full suit of silk, (including coat, vest, pantaloons, stockings, pocket handkerchief, and stock,) produced and manufactured wholly and entirely in his family."

FIRE-PROOF PAINT. The Buffalo Commercial Advertiser gives the following method of making paint, which when applied to wood, will secure it from both fire and rain. It is recommended as useful on floors under stoves, and it is stated that wood thus treated may be converted by fire to charcoal, but will never blaze.

Dissolve potash in water till saturated, then add, first a quantity [how much?] of flour paste of the consistency of common painter's size, and secondly, a quantity of pure clay to render it of the consistency of cream. When well mixed, apply it with a brush.

BRICK LINING TO HOUSES. A correspondent of the Cultivator filled in the walls of his house with run

burnt brick, set edgewise. One layer of hard brick, laid flat at bottom, prevent mice from ascending.—The cost of the brick was \$2, 25 per 1000.

EXPERIMENTS ON POTATOES. Thomas G. Lofson, in the same paper, gives the following experiment and results:—

"I planted five rows side by side, and the hills I experimented on side by side; and

1st. row, cut the common size, that is, one large potato into 4 or 6 pieces, 4 pieces in a hill.

2d. " 4 pieces in a hill, cut as small again.

3d. " 2 " " largest, small round ones.

4th. " 1 " " smallest, without cutting.

5th. " 2 " " of same size potato."

The following are the results in weight and number:—

1st. row, counted 53 potatoes, weighing 103 lbs.

2d. " " 62 " " 103 "

3d. " " 36 " " 84 "

4th. " " 37 " " 139 "

5th. " " 31 " " 84 "

LINEAS MATURE. B. G. Avery, of Onondaga Valley, near Syracuse, applied manure in the summer of 1839 to mown land, inverted the sod and sowed wheat. To other land, more worn, and previously in wheat, he applied refuse lime from the kiln, about 180 bushels to the acre, and sowed it. On the manured land, the straw was large, and the grain somewhat shrunk; on the limed portion, the straw was not so large, but was bright, the grain good, and the yield the greatest per acre.

CLOVER AMONG CORN. Allen Putnam, the new Editor of the New England Farmer, recommends the practice of sowing clover seed among corn, from personal experience, as being more certain of vegetation, the crop more free from weeds the first year, free from grain stalks, easier to mow, equally abundant, and better in quality; and the young plants are not overshadowed by grain early in summer, nor too much exposed to the sun after harvest. The mode is, to make no hill, sow at mid-summer, and cover with a one-horse harrow, and make all smooth with a hoe. Cut the corn closely to the ground. If necessary, the surface may be cleared with great expedition while the ground is frozen in winter, by means of a common hand hoe.

GREAT CROP OF CORN. The Kentucky Farmer gives the experiment of G. W. Williams, with a certificate of measurement, on a corn crop from an acre and an eighth, which yielded one hundred and eighty-eight bushels, or more than one hundred and fifty-eight bushels to the acre. The land was evenly covered with unfertilized manure, the corn, an early yellow variety, planted in rows two feet apart and one foot in the row, the surface kept level, the land rolled after planting, and the weeds subsequently cut by scraping the surface with a sharp hoe.

THE SCRATCHING SYSTEM. A correspondent of the Western Farmer, in commenting on large farms and miserable cultivation, and recommending a concentration of labor, speaks of a farmer who cultivated one acre of land adjoining a field of thirty acres, both planted with rye; at harvest a bet was made that the yield of the one acre was equal to that of the thirty acres, but was lost, the thirty acres, by accurate measurement, yielding three quarters of a bushel the most. Both fields he had seen, and also another where the owner offered to dispose of his crop of rye at a dollar an acre, but could find no purchaser at that price!

ENORMOUS HOG. J. S. Skinner, of the American Farmer, recently saw a hog, of the Bedford and Byfield breed, that weighed last summer 900 lbs. His increase has been since that, that he is now estimated to weigh 1300 pounds! The owner has refused, at one time \$150, and at another \$175 for him.

For the New Genesee Farmer.

REVIEW.

Journal of the American Silk Society—Edited by GIDEON B. SMITH, Baltimore. Nos. 11 and 12, for Nov. and Dec., 1840.

This is the only publication now remaining in the United States, exclusively devoted to the culture of silk. It was originally issued under the auspices of the American Silk Society; but the society itself is long since defunct, having existed only during the continuance of the multicalis mania. The Journal, however, has been continued, with distinguished ability, by Dr. Smith, the earliest, most steadfast, and most persevering advocate of the industry to which it is devoted. It contains, throughout, a mass of facts and information indispensable to the cultivator of silkworms in the present infancy of the art in this country. It is with deep regret that it is perceived that it can no longer follow the fate which has overtaken the other periodicals of the kind, unless the friends of the cause promptly step forward and hand in their subscriptions for another year. This crisis in its existence, together with an anxious solicitude for the prosperity of the cause, has induced to the present communication.

The second volume of the Journal has just been brought to a conclusion—the November and December numbers having been issued under one cover.—The value of these numbers perhaps exceeds any that have preceded them, with the exception of those which contain the account of the new and very important discovery of the editor, in regard to the principle of saving and preserving silkworms' eggs with safety, for the purpose of successive crops. The promulgation of this theory will, it is believed, constitute an epoch in the progress of silk culture in the United States. The principle is philosophical and rational; and while it explains, satisfactorily, most of the difficulties and disasters of the past year, a knowledge and appreciation of it will serve to guard against similar consequences in future. That its discovery should have been reserved for this day and country, is by no means surprising. In the old silk growing countries, the rearing of successive crops has been attempted; and, owing to the character of their climate, it is no doubt practicable. American cultivators, however, have looked to a more extended field of operation, and with the advantage of the multicalis, have conceived the practicability of producing silk throughout the warm season. That they have been subjected to much discouragement and disaster in the outset, ought not to be a matter of any special wonder. It is not to be expected that an art, confessedly in its infancy in this country, and conducted on entirely new principles, can be prosecuted at once with entire success. It may possibly require several years of experiment and observation, to establish what may be termed the *American System of Silk Culture*, on a sure basis; but the ultimate advantage, both national and individual, by which its triumph would be attended, offer strong inducements to persevere, even had its failure been much more general than it has been. As to the old system of single crops, reared in the spring, it has succeeded in no country better than in this.

The two last numbers of the Journal contain gratifying intelligence from various parts of the country. In Massachusetts the business appears to have flourished better than in any other State. There is a well organized State Society to promote its advancement, and the prohibition of silk goods has been highly creditable.—In Economy, in Pennsylvania, the quantity of silk produced, during the last year was very considerable; and at Frederickton, in Maryland, the culture was attended with decided success. These instances, together with numerous others that might be adduced,

go to show that the cultivators of the silkworm have still much encouragement to prosecute their labors.

The use of lime has obtained extensively, during the past season, as a preventive of disease amongst silkworms. In the 11th number of the Journal, there is an article on this subject which is worth more than the annual subscription.

The Address to the friends of silk culture, in the closing number, is a highly interesting paper. It contains a general view of the present state of the business in this country, with a notice of what is doing and may be done to promote its permanent advancement.

The following extract from the "LAST APPEAL" of the editor to the friends of the cause, deserves special attention:—"After considerable effort, the subscriber has been enabled to complete the publication of the second volume of the Silk Journal. This has been done at great personal sacrifice, the subscriptions to the work not having been sufficient to pay the expense by several hundred dollars. It now remains for the friends of the silk culture to say whether the Journal shall be continued another year. The subscriber believes that the information which he will be able to publish during the ensuing season, will be invaluable to the cause. The great and important improvements made in the art, in the United States and in Europe, and those that will be made next year, ought to be disseminated freely amongst the people. Particularly the NEW THEORY may be referred to as one item of immense importance, that requires the freest discussion and examination. If that theory shall be proved to be the true one, the widest circulation ought to be given to its principles and details; because it will effectually establish the business in the United States, and place it beyond the reach of casualty. All this cannot be done without the aid of a publication devoted to the cause exclusively."

The terms of the Journal are TWO DOLLARS a year, payable in advance; and we earnestly desire that the friends of the culture may freely sustain it. P.

Virginia, 1 mo. 12, 1841.

Lightning Rods.

Last summer during a thunder-storm, the lightning rod attached to our house, received a very heavy stroke of lightning—the shock was tremendous; but we only mention it at this time on account of the practical inferences to be drawn from the circumstances.

The rod is five-eighths of an inch in diameter near the top, but six-eighths of an inch below,—in two pieces screwed together, with a single point on the top capped with silver. It is upheld by large oak pins eighteen inches long, driven into the frame, and the rod passes through them near the outer end. It is painted to prevent its rusting. Near the surface of the ground it begins to slant from the house, descends into the earth, and terminates in a bed of charcoal six feet deep, which extends still farther from the building.

This fixture has been found sufficient with a slight exception, to let off a discharge that shook the whole neighborhood. The exception follows:—A stove pipe twenty feet in length, entering the chimney just under the roof, ten feet below the point of the rod and three feet from it,—received a small portion of the fluid, which passed through two chambers in succession on its way to the cellar. Two joists under the stove were very slightly shattered, and a few panes of glass broken by bursting outward. It appears that the nails conducted it through the pine floor into the joists.

The point of the silver cap was melted. This we suppose was occasioned by the crowding of the fluid to get down the rod; but if there had been more points, probably no fusion would have happened, and the stove pipe have been protected.

No traces of the lightning whatever, could be discovered on the oak pins, although the wood was in

contact with the rod; and neither glass nor any other substance employed to prevent the scattering of the fluid. We infer therefore that all such appendages are useless; and that it is quite as safe to fasten the rod to the building by clews as to have it stand off at a distance. It must even be safer unless the upper part leans against the building.

The prejudice against painting such rods, appears to be unfounded. We presume indeed that paint is not more objectionable than rust. †

The Roads.

The winter is a favorable time to lay up instruction. After a light snow has fallen with a brisk wind, let him that feels an interest in the state of the roads, get into a cutter and drive a few miles to make observations. For this purpose, he will commonly succeed best when he goes alone. Where the highway has been turned up and raised considerably above the general surface, he will find in most places more hubs than snow, and he may heartily wish for a good side-track.

As this is a term not often to be found in the vocabulary of path-masters however, we shall stop to explain; and as in many districts, owing to the improvidence of the people, nothing of the kind can be discovered, we shall proceed to tell what and where it ought to be.

The law allows our highways to be sixty-six feet wide; but if they are only sixty feet in the clear, and thirty feet be appropriated for the turnpike, then we shall have fifteen feet on each side for side tracks. Make the ditch six feet wide with easy slopes, smooth the bottom, and clear out all large and loose stones, and there will be a most convenient track for the snow to settle in, when it is driven by the wind from the turnpike. No better sleighing can be desired than what we occasionally find in a ditch of this description, while much of the track which is ordinarily used in summer, is unfit for any loaded sleigh to pass along.

But another side-track ought to be provided on roads comparatively level. Between the ditch and the fence there are nine feet remaining, where a smooth sod ought to be found; and on this not more than two inches of snow will be required to make comfortable sleighing. To see the traveler who has ventured from a more snowy region, at one time grinding over the bare ground with his horses on the strain; and then starting on a trot as he reaches the sod which perchance was left by the way side,—ought to make us, who have it in our power to do better, ashamed of our negligence.

Why not go to work in the summer, level down the inequalities, and remove all obstructions, but especially large stones whether fast or loose? In most cases, the necessary labor would not be a tythe of what is annually spent in hauling mud, or stuff equally unfit, into the beaten track. Have path-masters no memory? Can they never recollect in summer what we shall need in winter? If so, now is the time to make memorandums, as well as observations. †

Snow Drifts and Meadow Mice.

Young trees surrounded by snow drifts, are in a dangerous condition. Such as are quite small and covered by snow, in consequence of its weight and adhesiveness are almost sure to be crushed; while such as reach above the drift, with most of their limbs enveloped, will have them stripped off and their bark lacerated.

A worse disaster however, often happens to trees that stand in snow drifts. The meadow mouse, as if aware of its numerous enemies, seldom, if ever, attacks a tree that stands clear in the open ground; but where it can work in safety under cover, it is very destructive. We had one tree, three inches in diam-

eter, that stood in a snow-bank, and it was barked completely to the height of four feet.

Although drifts are much the most dangerous, yet under deep snows that lie long, mice frequently injure small trees. As a preventive, we had a small mound raised round each tree to the height of a foot, with great success, for we have not had a tree damaged that was properly guarded in this manner. When the mice, rooting along under the snow, come to such mounds, it appears that they generally turn away; but there is another advantage: In snows of moderate depth the wind sweeps it off; and even should a mouse persevere in ascending the mound, he would soon find his nose in the open air.

To prevent both crushing and gnawing however, we endeavor to tread the snow round all our trees when it is deep, whether by drifting or otherwise; and this is done to the most advantage when it gives a little, or is near to the melting point.

Italian Spring Wheat.

JONATHAN EDWARDS, of Virgil, Cortland county, states to us a successful experiment in the culture of this wheat. He went seventy miles, and succeeded in procuring twenty bushels, which, when thoroughly cleaned, amounted to only sixteen. These he sowed, as early as practicable, in the spring of 1837,—a part on five and a half acres, which produced 210 bushels, or more than 38 bushels to the acre; the rest was not so productive. The whole crop was 408 bushels. The land was ploughed only once, but was afterwards well pulverized with the harrow and cultivator, and ten loads of leached ashes applied to the acre. The crop was sold for seed at two dollars per bushel.

He has 115 acres of cleared land, from the tilled portion of which, (about one half,) he has raised in the last four years, more than six thousand bushels of grain. His wife has manufactured about two hundred pounds of butter to the cow the past season, and raised six calves.

Successful Culture of Silk.

ROBERT SINCLAIR, of the Clairmont Nursery, near Baltimore, writes to us as follows:—"A poor man in this State, on a very poor sandy farm, with the hope of bettering his condition, planted the morus multicaulis; but not being able to sell them, he turned his attention to the culture of silk. He fitted up his carriage house, and all the unoccupied rooms in dwelling, in a manner suitable for feeding, and by constant attention made good cocoons. These, by the assistance of his wife and family, he succeeded in reeling, doubling and twisting, and converting into good sewing silk, which he says produced one thousand dollars." Is there any person in this country who has had as little experience in raising cotton or flax, able to produce from either such successful results?

Clover in Orchards.

MESSRS. EDITORS—A writer over the signature of "South West," inquires if clover is injurious to orchards. Most certainly it is—though the degree of injury depends very much upon the nature of the ground, being greatest where the soil is thin, and the subsoil heavy and cold, and least where the reverse is found. I have noticed its deleterious effects in a great number of instances. The first case of the kind that came under my observation, was that of a fine thrifty orchard belonging to Judge Brewster, then of Riga, Monroe Co. These trees took well when transplanted, and flourished for several years with uncommon vigor, under the judicious treatment of that accomplished agriculturist. About that time clover was first introduced into that part of the country. The advantages attending its culture were at once perceived by Judge B., who sowed many of his fields with it, and among them the orchard above mentioned. A few years were sufficient to show the ill effects of the clover

upon the trees, in their stunted growth, rough, scaly, moss covered bark, and small yellow leaves; in a word, all those peculiar appearances which mark an orchard dying of starvation. Since that time I have watched the effects of clover on fruit and other trees, and have invariably observed the same effects, in a greater or less degree, follow its introduction.

The reason for this, I believe will be found in the formation of its roots, which run deep and interfere with those of the trees; while the grasses, Timothy, red-top, and the like, gather their nutriment at or near the surface, leaving the soil below for the exclusive pasturage of the trees. The long tap roots of the clover penetrate to the same depth with those of the trees, or at least that portion of them from which the trees derive their nourishment, robbing them of all, or nearly all, of that sustenance which goes to make up the growth of the clover.

Another reason will be found in the fact—for such I believe it to be—that the peculiar property of the soil which is sought for and taken up by the roots of the trees for their growth, is the very same which is selected and appropriated by the roots of the clover for its use; or, at least, much more allied to the same, than that which is taken up by the grasses above named. So that the trees and the clover suffer, not only by their proximity, but also from their sameness of taste—they are both seeking the same peculiar food in the same locality. It is like setting two guests at one table who will eat only of the same dish. The result is obvious—unless there is a plentiful supply, one or both must make a scanty meal.

H. M. WARD.

Rochester, January, 1841.

For the New Genesee Farmer.

Roots and Root Culture.

MESSRS. EDITORS—I propose to give you some account of our farming operations during the past season. If you think it will add anything to the general stock of knowledge, you are at liberty to publish.

CARROTS AND TURNIPS.

We ploughed up a piece of muck land upon which ruta bagas were raised last year. May 23d, ground in fine condition, drilled in the seed, at the rate of 3 lb. to the acre. Soaked the seed until it had considerably swollen, turned off water and sifted in plaster. Rubbed the seeds in plaster till they became distinct and separate, and passed through the drill without trouble. Owing to the dry weather and the seed being planted too deep, they did not vegetate very rapidly. The prospect however, was favorable for a very good crop, when one day went to examine them, and some two hundred sheep had taken it into their heads to get over a poor fence, and eat every thing down to the ground. This was about the 25th July. Had a good fence put round the lot and yarded the sheep several nights, occasionally dragging the field. On the 30th drilled in the Norfolk turnip, and have gathered a very tolerable crop. I am satisfied carrots will prove the best root, next the potato to cultivate, as they will do well on almost any soil, more hardy and less exposed to insects than turnips or beets, and less affected by the season than the potato.

RUTA-BAGA AND POTATOES.

Sowed almost two acres, and did not vegetate well, and what did grow was badly injured by the fly.—Ploughed up the ground and planted potatoes. Had a fair crop, but not so good as we should have had if we had not cultivated so many weeds among them. I am no believer in the Rohan. The Merino is better adapted to the country and with as good care will yield as bountifully. I think it is the best field potato that can be raised. We have no seed to sell however. Where the soil is favorable, I believe the potato, beyond all comparison, the most profitable root

crop the farmer can cultivate. If he have good potato land, the farmer had better eschew all these modern improvements in the root line, and go for his oldest and best friend. It is only in those situations where potatoes cannot be raised to advantage, as when the crop with good cultivation, and average years, falls below 300 bushels per acre, that other roots should be tried. From my observation this season, I am satisfied the Carrot, under all circumstances will prove the next best root for extensive field culture.

SUGAR BEET AND ROOTS GENERALLY.

The beet crop was a total failure, owing to the seed being planted too late (24th May.) I am not much in favor of them for field culture. However, I believe all of us have much to learn on the subject of root culture. All are agreed as to the importance of cultivating more roots than we do, and I am glad to see much attention exhibited on the subject. In conversing with an intelligent farmer yesterday, he told me he had been feeding his horses for some months upon carrots, and he was satisfied a bushel of carrots was worth as much for that purpose as a bushel of oats. Should further experience justify that assumption we shall wonderfully increase our profits, by the increase of the root culture. With ordinary care 500 bushels per acre might be counted upon as much certainly as 40 bushels of oats. Then, allowing them to be on a par as to feeding properties, you have in productiveness at least 12 to 1. It will cost more time to cultivate an acre of carrots than an acre of oats. But the difference will not exceed three to one; still a large balance in favor of the root. The root however, has another decided advantage, and that is in leaving the ground in fine condition for a spring crop, and making a great deal more manure.

I hope we shall hear more on this subject from the numerous list of your really able contributors.

Sincerely yours,

Darien, Dec. 21, 1840. T. C. PETERS.

For the New Genesee Farmer.

Saltin Butter.

Take 2 pounds of the best common salt; 1 lb. of good brown sugar, and 1 lb. of salt petre. Mix and beat all up together, and take one ounce of the composition for each pound of butter; work it well into the mass and close it up for use.

Butter cured in this way, appears of a rich, marrowy consistence, and fine color, and never acquires a brittle hardness or tastes too salt. It should be kept two or three weeks before it is used. If well made, it can be kept good for two or three years. This recipe is used and highly approved in many parts of England and France. W. N. H.

Fattening Poultry.

An experiment has lately been tried of feeding geese with turnips, cut up very fine and put into a trough with water. The effect was, that 6 geese, weighing only 9 lbs. each when shut up, actually weighed 20 lbs. each, after about three weeks feeding with this food alone.

Malt is an excellent food for geese and turkeys. Grains are preferred for the sake of economy, but will not fatten so fast. Oats ground into meal and mixed with a little molasses and water: barley meal mixed with sweet milk; and boiled oats mixed with malt, are all excellent for fattening poultry, reference being had to time, expense, and quality of flesh.

Corn, before being fed to fowls, should always be crushed and soaked in water, or boiled. It will thus go much further and digest easier. Hens will often lay in winter, when fed in this manner, especially if well sheltered.

W. N. H.

Fulton County, N. Y.

NEW GENESEE FARMER.

BERKSHIRES.

Farmers differ with regard to the valuable qualities of this breed of hogs. Without asserting, as some have done, that they are positively the best breed in existence, one thing is quite certain, that they far excel most of the native varieties raised in this country. Their rapid increase and dissemination for a few years past has been such, that they may readily be obtained with comparatively trifling expense. We hope that all who regard them with suspicion, will examine thoroughly their merits before rejecting them.

One of the strongest objections is their *smallness of size*. It is true they are not equal in this respect to some others. But the following instances will show that they may attain a respectable magnitude at least, and if farmers would cease buying inferior animals and cullings of litters, because they are cheapest, this objection would not, we believe, have much ground for validity. A recent importation by A. B. Allen, of Buffalo, contains a boar and sow, the former weighing 550 lbs. and the latter a few pounds less. They were fed on nothing but *grass* for months before weighing. One 18 months old, was sold in the Albany market in 1833, which weighed when dressed 333 pounds, and sold for about \$56. J. Lossing, of Albany, states that he has one imported male, that at fifteen months old, measured six feet five inches from the end of the snout to the root of the tail, and five feet six inches in girth; that of fifteen slaughtered by the Shakers of Watervliet in 1839, consisting wholly of what are called runts and the cullings of litters, from fifteen to seventeen months old, the average weight was 356 lbs; that one killed at Shaker village at Lebanon, at two and a half years old, weighed 800 lbs.; and that he himself killed one at sixteen months weighing over 400 lbs. The chairman of the committee on swine for Tompkins county, in his report, says he recently saw pigs in Rhode Island, a cross between the Berkshire and Byfield breed, (the latter a smaller breed than the Berkshire,) that weighed 300 lbs. each, at a little less than nine months old. J. R. Caldwell, of New Windsor, fattened a pair of Berkshire barrows, and killed them at a little more than a year and a half old, when they weighed 1,050 lbs. They were fed on grass alone during the two summers, and given other food only a few months before they were butchered. Such instances might be greatly multiplied. They show that, by proper management at least, a large size may be attained.

But *size* is by no means the most important consideration. If a Berkshire at 200 cuts up as well, and affords valuable parts in as great a proportionate quantity as another hog at 500, who would hesitate between them? Many, in their great carelessness for size, are sacrificing quality. The large bony breed will indeed fill the barrel the soonest,—with heads and shanks,—but, as somebody has justly observed, it is of far more importance to fill the *consummer*. Accurate experiments are greatly needed to exhibit the relative qualities in this particular, of the Berkshire and other breeds; the best we have seen, are the following, taken from the report of the committee before mentioned. The first is a sow of "common breed," two and a half years old, and weighed when dressed 235 lbs. The second is a *half blood* Berkshire sow, 18 months old, and weighed 204 lbs. The first had raised one litter of pigs, the Berkshire two litters. The third example is a half blood Berkshire barrow, eighteen months old, fattened in the ordinary way.

	1st Sow.	2d Sow.	Barrow.
Lard.....	26 lbs.	16 lbs.	31 lbs.
Hams.....	32½	31	52
Tender loin...	5½	3½	5
Fat.....	8½	6½	9
Mess Pork.....	96	103	176
Prime "	28½	16	26
Spare ribs.....	20	12	16
Head.....	18	16	21
	235	204	336

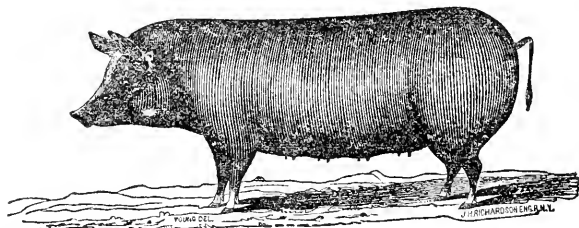
Farmers are usually extremely particular to obtain the full market price for the grain—the loss of ten cents on a dollar by bad marketing would be insufferable. But why is it, that they are not as careful in relation to the market at home, the market of their own making, which is to tell whether they get the same return for twenty bushels of corn, as another man with an *improved Berkshire* market gets for ten? A near neighbor lately butchered a few pigs, several months old, a part of half blood Berkshire, and the rest full blood; the latter were two months younger, and received similar feeding in every respect, but averaged, on killing, full weight with the half bloods. The half bloods were a cross with a large and excellent native variety. It is the quantity of flesh and fat made, (and little offal,) for the small quantity of food given, which pre-eminently distinguishes the Berkshire breed, which every-

one acquainted with them have observed. A striking instance of this quality, is given by Wm. P. Curd, of Kentucky, of a full bred boar, which at eleven months was castrated in consequence of an injury rendering him useless—he weighed at that time 122 lbs. "After being fed 64 days, he was weighed, and lifted the beam at 410 lbs., showing the astonishing gain of *four and a half pounds a day*. He is now fed solely on grass, and weighs 550 lbs. at the age of two years."

In consequence of the well attested excellence of this breed of hogs, many attempts will doubtless be made to impose on the farming community; caution will therefore be necessary in procuring animals, as well as in deciding on qualities which may belong only to the genuine breed, and not to spurious ones.

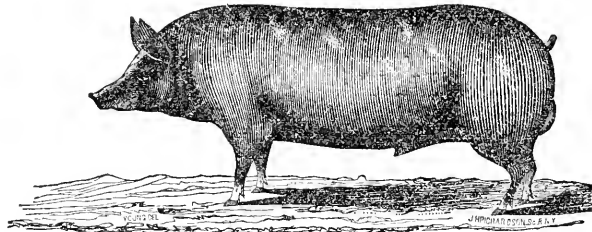
Farmers who are in possession of Berkshires, would do the community a great favor, as well as themselves, by instituting experiments, by *accurately weighing and measuring*, showing the quantity of food they consume, their increase in weight, and the relative proportion of the different parts yielded in cutting up; and if these were accompanied with experiments of a similar character on the common and other breeds, they would be of still more value.—The labor of such experiments would be very trifling.

COL. SAWYERS' BERKSHIRES.



According to promise, we give the portraits of two more Berkshire swine, property of Col. Amos Sawyer, of this city.

The above is a beautiful sow, 2 years old, weighing 300 lbs. She is not fat, but broader and heavier than represented in the cut. She is now with pig by young Prince Regent, (figure in our last,) and will litter next month. (Col. S. expects to have a few pigs to spare in the Spring, but most of them are already engaged.)



This pig is one year old, and weighs about 275 lbs: is from the above sow, by a full blood imported boar sold to Baltimore for \$800.

Bushes, not Bushels.

An error occurred in our last paper, on page 2, col 3, which materially alters the sense, and makes our venerable assistant appear somewhat ludicrous, which we very much regret. He did not say that he planted some dozen or fifteen *bushels* of currants in a row (!) but that he planted that number of *bushes* in a row. The error was noticed and marked by our printer and proof reader, but overlooked by the compositor. He promises to keep his *species* on hereafter.

Bees and Honey.

SAMUEL MARROT, of Hudson, N. Y., informs us that he has very good success with his bees, managed as follows:—The hives are placed under a shed; stand from one to three feet from the ground, and have the bottom entirely open, so that if any worms are produced, they fall to the ground, and cannot return. A hole, 2 inches square, is made in the top of each hive, over which a box, 9 inches square, is placed in the spring. In the fall these boxes are removed, and found to contain about 20 pounds each of the finest honey.

The British Corn Laws.

The N. Y. Enquirer of Dec. 24, contains some interesting comments on the remarks of our correspondent, S. W., in the Dec. No. of the Farmer. The Editor dissents from the opinion of S. W., however, as we have no right to expect that England will so readily her corn laws as to admit the bread stuffs of this country on payment of a duty of 20 per cent. In the contrary, he thinks that if proper measures be taken, this modification can be effected; and to this end he makes the following suggestion:—

"We propose that there should be Anti-Corn Law societies formed in New York, Troy, Rochester, Buffalo, Cleveland, &c. The declared object of these societies shall be, to obtain, by lawful and pacific means, the repeal or modification of all laws, statutes and regulations of foreign nations, which hinder the admission of all American products upon as favorable terms as the products of such countries are admitted into the United States. The principal means to be relied on, are the collection and diffusion of statistical and other information among the people by means of correspondence, agents, public meetings, liberative conventions, the publication of a monthly journal, &c. They should also endeavor to engage the cooperation of our government, by such measures of negotiation and legislation as may from time to time be deemed wise and prudent."

As our object and aim is to promote the great agricultural interests of the country, we most sincerely wish that such a modification of the British Corn Laws could be effected; but we cannot bring our minds to view the subject in the same light as our New York friend; nor can we think that, in the present state of affairs, any material good would result from carrying out his suggestions.

We like the remarks of the *American Citizen* on this subject, which may be found on page 19, headed "Our Wheat Growing Interests."

FARM TRANSACTIONS.

Piggery and Pork Making.

Messrs. Editors—Under the above title, I propose, from time to time, to give you some of our experience in farming. If others will do the same, will be but a few months before your journal will come one of the most valuable in the Union. Let us be facts. Let farmers state their operations for the year—pointing out what their own experience is formed defective,—and we shall have a mass of facts before us to serve as beacons in our onward course; and save us, if we read your paper, many dollars which would otherwise be lost in unsuccessful experiments.

THE PIGGERY.

In constructing a piggery, I went upon the principle that a judicious outlay of capital upon a farm necessary buildings or other improvements, increases in a much greater ratio than the interest—the productiveness of the capital already invested. And so, that to farm profitably there must be a regular system in the management of every branch of your business. Thus there should be a place for your horses and carriages, harness, grain and hay, all under one roof if possible; and in like manner for all your other kinds of stock, and in particular, a place where you can keep your swine, from the pig to the porker, and all their feed convenient to your hand, having a place for every thing, it is easy to keep every thing in its place; and thereby gain greatly in the saving of time in carrying on business.

The piggery is designed for fattening from 50 to 100 pigs annually, and the fixtures have been made with that reference. By the annexed plan, you will perceive that it has a front 60 by 20 feet. The first floor having 13 feet posts, the others only 7. The second floor is 50 by 20 feet; 10 feet of one end being taken for a boiling room, or rather for a furnace

and boiler, as all the cooking is done on the floor, which is on a level with the pens. The rear, as far as was built last year, is 30 feet square, 6 feet posts, with an alley through the centre, 4 feet wide. There are three pens on a side, 10 by 13, and each pen will accommodate 7 large hogs, or 8 muddling sized ones while fattening. (We shall continue the pens by building another, 30 feet square, so that there will be 6 pens on each side of the alley; or the building for the hogs will be 30 by 60.)

Under the main building is a cellar, 20 by 60, and 8 feet deep; 10 feet from the east end is walled out by itself and no floor laid out. Here is a boiler, made of sheet iron, not so thick as boiler iron, but a medium between that and stove pipe iron, six feet long and 24 inches in diameter, with a safety valve, &c., and capable of working about 45 pounds pressure to the inch, though it is never worked over 18—set in an arch or furnace. The steam is carried from the boiler to a series of vats on the floor adjoining, constructed as follows:—The outside is of 2 inch pine plank, 12 feet long in the clear, matched and keyed together into one bin or vat, 3 feet deep and 4 feet wide. It is divided into four equal parts by tight partitions of the same material; so that we have 4 vats, each 3 feet deep, 3 feet wide, and 4 feet long, holding about 7 barrels of liquid, or 22 bushels of vegetables. All the feed for our hogs is cooked in these vats, by steam, and fed from thence directly to them without handling after being once put into the vat. The saving of labor is very great, as well as the expense of cooking; for 100 bushels of potatoes or apples can be cooked in 6 hours, by a boy 10 years old. I have repeatedly cooked 50 bushels in 3 hours, and taken every thing cold. The vats can be made full of pudding in much less time.

The building is doubly boarded, and the floor over the cellar is lined, and has scuttles, to enable us to ventilate the cellar at pleasure. The hog pen is also doubly boarded—the front fitted with swing doors so that the hog can go in and out at pleasure, and still keep the building sufficiently warm. A floor is laid over head, and thus gives us a good room for storing soft corn in the fall. Ten feet of the further end of the cellar is partitioned off for an apple cellar, and is 10 feet deep. The apples are put in shallow bins, of which there are 30, which hold 8 bushels each.—Thus, it will be perceived, the object has been obtained. We have a place to keep our hogs and their feed, whether green or dry, and prepare it, all under the same roof.

FEEDING HOGS, &c.

We took up our hogs from the stubble and orchard, the 21st September, and commenced feeding with cooked apples and bran—2 bushels of bran and 3 quarts of salt to 20 bushels of apples. After the apples were gone, we fed with pumpkins and potatoes boiled with meal (corn and cob ground together.) Then with pudding fermented, 10 bushels of meal to 6 barrels of water, and closed with four weeks feeding boiled corn. Salt was used uniformly, at the rate of two quarts to a vat, whether meal, corn, or potatoes. The potatoes were boiled and mashed in the same water, while hot, and meal mixed with them. Our hogs thrive well, which satisfies me that it is an error to suppose the water in which the potatoes are cooked, is injurious. The corn was cooked by making the water boiling hot, then put in 15 bushels of corn and let it soak for at least 12 hours, then put on the steam. It requires about 12 hours to cook the corn after it has soaked, and when you commence, the corn should only be covered with water. The hogs eat the boiled corn with great avidity, and digest it as well as the pudding. The saving in cooking the corn is, the toll and waste

at the mill, and the trouble of milling, when, together, is something of an item. The corn should be steamed till it turns rather brown, and loses its white, parboiled appearance. We have never fed hogs any thing that has made them lay on fat equal to the boiled corn. We feed no water, as after repeated trials the hogs would not drink it, though none is fed with the corn except what the kernel has imbibed in cooking. At least one-quarter is saved by cooking, and then there is considerable gain in not feeding until after fermentation.

We shut up our store hogs, feed them with boiled potatoes and provender, and keep them in thrifty condition till they are turned out to grass in the spring. We keep all our hogs, whether store or fat, well littered with clean dry straw.

Perhaps I have been tedious. If so, my desire to contribute my mite is the only excuse.

Sincerely yours, T. C. PETERS.

Darien, January 8, 1811.

P. S.—Will some of your chemical friends give you a bill of such articles as a farmer would require for a cheap Laboratory?

T. C. Peters's Piggery.

Fig. 1.

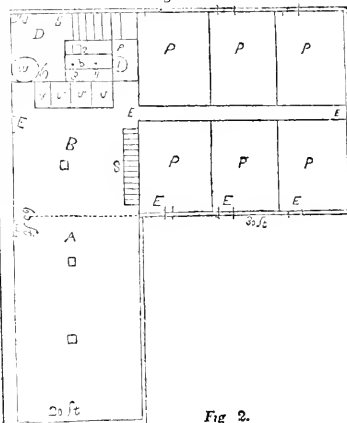


Fig. 2.

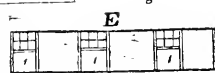


Fig. 1. Ground plan.

A, B, Front, 60 by 20 ft.—the part B two story.

P, P, &c., pens, 10 by 13, with alley between.

D, kitchen; a, arch and furnace; b, boiler; 1, supply barrel for boiler; 2, chimney, 8 inch stove pipe; 3, steam pipe; 4, safety valves d, drain, e, water cistern, supplied from spring, and raised to vats, &c., by pump; 5, stairs to cellar; 6, cellar door,—the kitchen part is 5 feet below the floor; r, r, r, r, the vats in which the cooking is done, and which are on the same level with the pens, and from which the feed is carried direct to the pens; s, stairs to second story, which is a very useful store-room, as well as the part A; E, E, &c., door; p, platform over part of furnace and boiler.

Fig. 2. E, side view of pens; 1, 1, 1, swing doors with windows over—the windows are 6 lighted, 7 by 9 glass, and are made to slide down when necessary.

Darien, N. Y.

T. C. PETERS.

Pump-hogs, for conducting water, made of perishable wood, may be preserved a long time under ground by surrounding them with ashes or lime, and the joints should be cemented with tar. Those always filled with water will last longer than if occasionally empty.

Compost Heaps.

The following most excellent remarks on the manufacture of compost, are richly worth the perusal of every farmer, old or young, rich or poor. Most of them have the merit of being as applicable to this country as to England. Every sentence is full of meaning, and we are tempted almost to print one half of the article at least, in italics. Most of our farmers have yet to take the first step in the proper management of manures—a thing, which if well understood and attended to, would, in a few years, triple the products of the country, and, to speak very moderately indeed, be worth yearly to the country HUNDREDS OF MILLIONS OF DOLLARS. We think there will be no difficulty in proving this. If the writer of the following remarks had mentioned lime as a component part of his compost heap, we think it would have been better, as we consider this ingredient as indispensable.

From the Journal of the English Agricultural Society.

AN ESSAY

On making Compost heaps from liquids and other substances; written on the evidence of many years experience.—To which the price of ten sovereigns was awarded.—By JAMES DIXON, Esq., Secretary to the Manchester Agricultural Society.

The force and power of an agriculturist to produce good crops, mainly depends on the manures he can command; and how to derive the greatest possible benefits from his immediate resources, is one of the most useful subjects that can engage his attention. The English Agricultural Society having offered a premium for the best mode of making compost heaps, I venture to forward the committee my ideas on this most important branch of rural management; and in doing this I shall state the course I have pursued in this particular for many years, and which every additional experience inclines me not to make any systematic alteration.

My farm is a strong, retentive soil, on a substratum of ferruginous clay; and being many times disappointed in what I considered reasonable anticipations of good crops, I determined on a new system of manuring. Though quite satisfied of the expense which would necessarily be incurred by my plan, I still determined on its adoption. At the onset I effectually drained a considerable part of my farm. My next object was how to improve its texture at the least cost—(perhaps I may be allowed to state that my holding has always been at rack-rent;) for this purpose we carted great quantities of fine sawdust and peat earth or bog; we had so far to go for the latter, that two horses would fetch little more than three tons in one day—one horse would fetch three cart-loads of sawdust in the same time. Having brought great quantities of peat and sawdust into my farm-yard, I laid out, for the bottom of a compost heap, a space of considerable dimensions, and about three feet in depth; three-fourths of this bottom was peat, the rest sawdust; in this we conveyed daily the dung from the cattle sheds, the urine is also conducted through channels to wells for its reception, (one on each side of the compost heap); common water is entirely prevented from mixing with it. Every second day the urine so collected is thrown over the whole mass with a scoop, and at the same time we regulate the accumulated dung. It is being continued for a week, another layer, nine inches or a foot thick, of peat and sawdust (and frequently peat without sawdust) is wheeled on the accumulated heap. These matters are continually added to each other during winter, and in addition once in every week never less than 25 cwt., more frequently 50 cwt., of night soil and urine; the latter are always laid next above the peat or bog earth, as we think it accelerates their decomposition. It is perhaps proper here to state that the peat is dug and exposed to the alternations of the weather for several months before it is brought to the heap for admixture; by this it loses much of its moisture.

In some cases, peat contains acid or astringent matters, which are injurious to useful vegetation. On this I have not tried any decided experiments, but am led to the supposition by frequent lyceing stones, some in a partial state of decomposition, others wholly decomposed in bogs, and at the depth of several feet from the surface. Some years experience

has convinced me of the impropriety of using retentive peat; proceeding in the manner I recommend, it is superior, and more convenient on every account—much lighter to cart to the farm yard or any other situation where it is wanted; and so convenient I am I of its utility in composts of every description of soil, except that of its own character, that wherever it can be laid down on a farm at less than 1s. per ton, I should recommend to every agriculturist and horticulturist that can command it, even at the cost here stated, to give it a fair trial. So retentive and attractive of moisture is peat, that if liberally applied to any arid, sandy soil, that soil does not burn in a dry season, and it so much improves the texture and increases the produce of an obdurate clay soil, if in other respects rightly cultivated, that actual experience alone can fairly determine its value.

For the conveyance of night soil and urine, we have the largest and strongest casks, such as oils are imported in; the top of which is provided with a funnel to put the matters through, and the casks are fixed on wheels like those of a common dung cart. For the convenience of emptying this carriage, the compost heaps are always lower at one end; the highest is where we discharge the contents, in order that they in some degree spread over the whole accumulation: the situation on which the wheels of these carriages stand while being discharged is raised considerably; this we find convenient, as the compost heap may be sloped six or seven feet high: low compost heaps, in my opinion, should be avoided. The plan here recommended, I have carried on for some time. I find no difficulty in manuring my farm over once in two years; by this repetition I keep up the fertility of my land, and it never requires more than a moderate application of manure.

I am fully aware that there are many localities where not her peat nor night-soil can be readily obtained; but it is worth a farmer's while to go even more than twenty miles for the latter substance, provided he can have it without deterioration: the original cost is often trifling. On a farm where turnips or mangold are cultivated to some extent, the system here recommended will be almost incalculably advantageous; a single horse is sufficient for one carriage—mine hold upwards of a ton each; six tons of this manure in compost with peat, or, if that is not convenient, any other matters, such as ditch scourings, or high headlands which have been properly prepared and laid in a dry heap for some time, would be amply sufficient for an acre of mangold or turnips. This manure is by far the most invigorating of any I have ever yet tried; bones in any state will bear no comparison with it for any crop; but it must be remembered that I write on the supposition that it has not been reduced in strength before it is fetched.

Convenience frequently suggests that compost heaps should be raised on different parts of a farm; but, unless in particular instances, it is well to have them in the yard; in it all the urine from the cattle stalls may be employed with the greatest economy; and be it remembered that the urine from animals, in given weights, is more powerful than their solid excrements.* How important then must it be to the farmer to make the most careful use of this liquid. It is sometimes carried on the land, but that practice will not bear a comparison with making it into composts in the manner here recommended. Great waste is often made in putrescent manures after they are carted on the land; instead of being immediately covered or incorporated with the soil, we not unfrequently see them exposed for days together in the hot rays of a scorching sun, or to the injurious influences of a dry wind. I have before stated that compost heaps should on many considerations be raised in the farm yard; still, circumstances are frequently such that it is more proper to make them at some distance in the fields. If a headland becomes too high by frequent ploughings or working of the land, in that case it should be ploughed at the time when clover or mixed grass seeds are sown with a white crop, for instance, barley or oats, and clover for the year following: a headland might then be ploughed, and a number of cart loads of some manure heaped from one end to the other. Immediately after this it should be trenched with the spade (or what is sometimes called digging) and

* This must be taken with some limitations, for urine contains 90 to 95 per cent. of water; and unmixd dung contains all the salts of urine, besides much mucus and other substances.—W. L. RUSK.

ridged high, in order that an action should take place between the soil and manure; by this means the mass would soon be in a condition for turning over, and any ditch scourings, or other matters which had not in the first instance been used, might now be added to the mixture. The heap should then be allowed to remain closed for a few weeks, then turned over again; at this turning, in all probability, the mass would be much reduced; if sufficiently reduced, raise the ridge of compost well on both sides but, instead of its top being pointed, make a trench or cavity on the top from one end of the heap to the other. This cavity should be made tolerably retentive of moisture, which may be effected by treading with the feet; arrangements of night soil or urine from the cattle stalls may then be emptied into the trench, and the bulk of the heap would determine how many were required; this being done, a little earth should be thrown into the trench, and the heap allowed to remain in that state until the middle or latter end of autumn; it will then be ready for another turning; but at this time care must be taken to have the heap well made up at the sides as pointed at the top; in this situation rain will be thrown off, and the compost preserved dry until winter presents some favorable opportunity for laying on the young clover, wheat, or for making any other use of it which may be required.

The beneficial effects of top dressing young clovers or mixed grass seeds is scarcely ever regarded with due attention. By this help, crops are not only much increased, even 30 or 50 per cent., but the are also ready for cutting much sooner, which in backward spring gives the stock farmer inestimable advantages for sorting his cattle, and thereby raising manure at his pleasure. The full effects of this practice I first experienced in the dry season of 1831. I had some clovers which had been manured the previous winter; my land was soon covered with crop, and that so vigorous a one, that the hot weather did not overpower it. My cows that summer were tied up during the day-time, and in the night they were turned out into the pastures; most of the stock in my district were much distressed from overheat as well as from being short of food for some weeks; milk yielded little butter, scarcely any for time was offered in our large market town—I doubt that year will be remembered by many gentlemen on the Agricultural Society's committee. However, was under no difficulties on account of the season; my clovers produced plenty of food for my cattle, and in return they yielded as much milk and butter as I ever recollect from the same number. I am persuaded that the same satisfactory results would have followed if the same system had been adopted for feeding; it was that year my attention was first directed to raising compost heaps from urine. This I now do frequently without the help of any dung from the cattle stalls; the same occasion called my mind to another matter worth every farmer's attention.—I allude to the great superiority of the manure raised in summer, as to that produced in the stalls during winter. I very believe the difference is fifty per cent., and stock are fed in a great measure during winter with artificial food.

In an arrangement for making compost heaps from urine, I would recommend a receptacle to be made at the back of the cattle stalls just outside the building; this should hold about twenty cartloads of mould, or any other matters to be employed; if, in situation were a little lower than the cattle sheds all the urine would pass into it, and there remain until the mass is completely saturated, which will be sufficient; when the earthy matters are covered over with it, the compost may then be thrown over and the proceeding again renewed. In order to show part of the benefits of this practice, I beg leave to observe that the most foul or weedy mould may be used; the action of the urine, if not reduced by water, is so powerful, that wire worms, black slug, many other destroying insects, and all vegetable weeds, &c., when in contact with the urine for time, are deprived of their living functions. This situation for raising this compost should be protected from the weather by a covering similar to a cashed; indeed, the deteriorating influences of rain, snow, and wind, on all putrescent matters or composts, are so serious, that, in my humble judgment, it would be worth while to have places under cover where these are usually laid down.

I beg to conclude this essay with some observations made on a former occasion: No amelioration

and with the rural art is of the more lasting value than correcting the constitutional defects of the soil. The best horticulturists and market gardeners are many of them perhaps unacquainted with theory, yet perfectly understand the great art that practice; and in this particular they are all of them superior to many farmers.

How often do we see a stiff soil to a great degree from that cause only; yet vicinity of a sandpit and adjoining moist bogs a considerable breadth of coherent land, might be made double its present value, by a liberal top dressings of peat, which is productive from causes of a contrary nature. The poverty of many extensive tracts of manifest exhibition of the want of skill or care of their owners and cultivators.

Public Lands—Emigrants.

In the year 1835, the sales of public lands had more than three millions per annum. In 1836, however, in consequence of the speculation of that period, the sales of a single year amounted to about fifteen millions, and formed one of the largest in the vast increase of the public lands. In 1837, they were suddenly reduced to a usual amount.

But, however, is the public domain, so great the land, both foreign and domestic, and so very fertile the broad plains of Illinois, Indiana, and Missouri, that the permanent average public land sales is now very much increased.

That in the year 1835, the number of acres sold, was 1,414,007. The purchase money \$4,405,500. During the three first quarters of the year 1839, the sales showed the following results:—

For the 1st quarter,..... 3,771,994
For the 2nd quarter,..... 4,766,252
For the 3rd quarter, we have receipts for 1839, \$1,000,000.

The year 1839 was not deemed a prosperous year, but that year we have the large amount of about \$5,000,000 of dollars, received into the treasury on public lands. This may be deemed some of the future average receipts from this source.

Suppose 160 acres to be the average quantity of land required for each person, and it is very near the number of the public lands each man has, as number, as heads of families, represent persons.

Of this aggregate, about 70,000 acres are the property of emigrants, and the residue domestic population residence. The result corresponds very nearly, we believe, to the actual fact. Such a fact as this shows how the population is changing, and with what vigour the west waves of the people move over our country. In ten years, more than 2,000,000 people have moved from the shores of the Atlantic to the Connecticut, and the Delaware, or the Ohio lands of England, Ireland, and Germany, on the plains of the West. And in ten years, this million will add from three to four millions more to their number, by natural increase, and thus the Great Western Empire extends, and multiplying its numbers in a congealing proportion.—*Cincinnati Chronicle*.

The Riches of the West.

Before us the agricultural returns of nine townships of Monroe county, N. Y., containing 22,000 acres. The result is astonishing. It is proof of the immense and almost illimitable riches of the heaven-blessed United States. These are in gross as follows:—

Wheat,.....558,000 bushels.
Rye,.....245,000 "
Corn,.....184,000 "
Potatoes,.....329,000 "
Barley,.....110,000 lbs.
Various liquors,.....2,200 bbls.
There is only a part! Such trifling affairs as dairies, manufactures, &c., we have not counted. But look at the result. Every living man, woman, and child, has in the townships, in the productions, 25 bushels of wheat, 13 bushels of corn, 14 bushels of potatoes, &c. Or any head of a family has 100 bushels of wheat, 50 bushels of corn, and 30 lbs of sugar.

And these townships raise at least 100,000 bushels of wheat, 50,000 bushels of corn, and 10,000 bushels of potatoes, &c. These much bread stuffs are necessary for the support, and other things in proportion!

But if the reader be a little surprised at this, he will be more so, when he learns that these nine townships made \$165,000 worth of butter and cheese; raised \$32,000 worth of fruit; made \$10,000 worth of home cloth; and produced \$450,000 worth of manufactured articles; or \$30,000 a piece for each living soul. This affords matter for comment, not only on the physical but the moral condition of the county. None but a country in the highest moral condition, can produce such a result. These people are not only well off, independent, but they are the richest in the world. Nor is this an isolated example. Our own Western Reserve will show the same result, so will many other districts.

Beside these wheat fields rise the village church and the village school. There are happy faces, young and old, around them. Long may they enjoy the peaceful fruits of happy, independent labor!—*Cincinnati Chronicle*.

Riches of Ohio.

We have taken occasion to illustrate the great resources of our country, and especially the Western portion of it, by the statistics of a part of Monroe county, N. Y. The result of that inquiry was, that the people of that section actually raised near five times as much bread-stuff as they could consume, and therefore four fifths of it was positive profit.

We shall now continue the illustration of this fact, by the agricultural statistics of WAYNE county, Ohio, as published in the *Western Democrat*.

Wayne county is a large county, containing some 700, or 800 square miles, on the great central table land of the State; partaking of the same general character as that vast plateau which extends from the foot of the Alleghenies to the Mississippi. It is not intersected by any of the great internal improvements (canal or railroad) in the State. It is therefore a fair specimen of the agricultural condition of Ohio.

The county of Wayne contains about 5,000 male adults, which may therefore stand as representatives of the families. Of these, 7,000 or 7-8ths of the whole are farmers.

We will now see what proportion of bread-stuffs, or what may be deemed the staff of life to man, is raised in this county.

Wheat,.....753,000 bushels.
Rye,.....50,000 "
Buckwheat,.....20,000 "
Corn,.....335,000 "
Potatoes,.....132,000 "

Of these articles, only *potatoes* are raised from men corn, which, though bread-stuff, is in Ohio chiefly fed to animals, and include *potatoes*, of which man is almost the only consumer. We have then, 945,000 bushels of grain, or its equivalent, used as the food of man.

Allowing the usual average for the consumption of these articles by the population of Wayne, and the result is that the people there raise four and a half times as much bread-stuff as they consume. In other words, of 43 bushels of grain raised in that county, 34 may be set down for exportation. In this great fact we see how it is that such enormous amounts of flour arrive at the ports of Buffalo and New Orleans. At Buffalo, 27,000 barrels of Ohio flour arrived in a single day! But this is only one side of the statistics of this county. There are raised in it,

Oats,.....543,000 bushels.
Hay,.....38,000 tons.
Wool,.....120,000 lbs.
Sugar,.....177,000 "
Horses and Mules,.....82,000 "
Hogs,.....35,000 "
Sheep,.....75,000 "

And, we may add, there are less than 1500 barrels of Whiskey made in the county.

We give these facts as specimens of the domestic industry, and the substantial wealth of this prosperous country. We doubt whether any thing like it can be found in the history of nations. It is every man (with few rare exceptions) sitting under his own (not vine and fig tree) fruit trees, looking over his own waving fields, enjoying the rewards of his own labor, secured by wise and equal laws, under a free government and a merciful Providence. It brings us back, in idea, to the days of Abraham, with the addition of blessings which Abraham knew not of. This is Democracy in America, which neither needs the comment of Philosophy nor the songs of Poetry to be seen, felt, and understood.

Apple Molasses.

The Ohio Farmer gives the following mode of making apple molasses, and we have no doubt that it is more sweet, and for some purposes superior to that

made by boiling down the juice or cider; for this will be likely to change in some measure by the vinous fermentation, before it can be boiled down.—*American Farmer*.

"APPLE MOLASSES.—There is many a good housewife who has more faith in her own experience than in the science of chemistry, that knows not the value of apple molasses; but still believes it to be the same kind of rat, smoky, worthless stuff that has from time immemorial been made by boiling down cider. It is not within my province, at this time, to attempt to convince such that there is a chemical difference, though it might easily be shown that they are almost as different as sugar and vinegar. I would, however, invite them to lay aside their cider this year, and try the plan of boiling down the juice of the apple that has not been exposed to the air by grinding and pressing.

Last autumn I placed a number of bushels of Wetherill's sweetening apples in two large brass kettles, with water just sufficient to steam them: when they boiled soft, I turned them into a new spelter basket, containing some straw, and placed on them a barrel head and a heavy weight. The juice was caught in a tub. This was repeated until I had juice enough to fill the kettle, when I commenced boiling down, and attended to it strictly, till it became of the consistency of cane molasses. The native acids of the fruit, imparted a peculiar flavor, otherwise it could hardly be distinguished from the syrup of the cane. It was used in my family for making sweetmeats, pies, for dressing on puddings and griddle cakes, and a variety of other purposes. The cost of making is very trifling, and the means are within the reach of every farmer."

Horticulture.

BY MRS. LYDIA H. SIGOURNEY.

If the admiration of the beautiful things of nature, has a tendency to soften and refine the character, the culture of them has a still more powerful affection. It takes the form of an affection. The seed which we have sown, the tree of our planting, under whose shade we sit with delight, are to us, as living, loving friends. In proportion to the care we have bestowed on them, is the warmth of our regard. They are also gentle and persuasive teachers of His goodness, who cautions the sun to shine and the dew to distil; who forgets not the tender buried vine amid the snows and ice of winter, but bringeth forth the root long hidden from the eye of man, into vernal sun, or autumnal fruitage.

The lessons learned among the works of nature, are of peculiar value in the present age. The restlessness and din of the rail road principles, which pervades its operations, and the spirit of accumulation, which threatens to corrode every generous feeling, are modified by the sweet friendship of the quiet plants. The toil, the hurry, the speculation, the sudden reverse which mark our own times, beyond that which have preceded them, render it peculiarly salutary for us to heed the admonition of our Saviour, and take instruction from the lilies of the field, those peaceful denizens of the bounty of heaven.

Horticulture has been pronounced by medical men, as salutary to health, and to cheerfulness of spirits; and it would seem that this theory might be sustained, by the placid and happy countenances of those who use it as a relaxation from the excitement of business, or the exhaustion of study. And if he, who devotes his leisure to the culture of the works of nature, benefits himself—he who beautifies a garden for the eye of the community, is surely a public benefactor. He instills into the bosom of the man of the world, panting with the gold fever, gentle thoughts, which do good like a medicine. He cheers the desponding invalid, and makes the eye of the child brighten with a more intense happiness. He furnishes pure aliment for that taste which refines character and multiplies simple pleasures. To those who earn their substance by laboring on his grounds, he stands in the light of a benefactor. The kind of industry which he promotes, is favorable to simplicity and virtue. With one of the sweetest poets of our mother land, we may say,

"—Praise to the sturdy plough,
And patient plough, and shepherd's simple crook,
And let the hire mechanic's toil be pailed
With honor, which exalts by the power
Of long contemplation, the laborer's hand,
Cut off that hand, with all its world of woes,
From a too busy commerce with the heart."

Lady's Bazaar.

BEAUTY.—After all, the most natural beauty in the world is honesty and truth. For all beauty is truth. The features make the beauty of a face; and true portions the beauty of architecture; as true mechanism, truth still is the perfection.

CENSUS AND STATISTICS OF MONROE COUNTY.

TOWNS.	Population.	Slaves & Colored.	Neat Cattle.	Sheep.	Swine.	Wheat raised '99.	Oats '1899.	Corn '1899.	Potatoes '1899.	Tons of Hay '99.	Pounds of Sugar made.	Wool, combs sold in 1899.	Dairy Products in 1899.	Orchard Products in 1899.	Hemp made, value.	Stones, Gravestones &c., and capital invested.	Value of manufactures—mills.	Value of manufactures—mills.
Mendon,	3456	1094	2537	13579	3778	34993	44705	33565	37644	3721	11540	1945	93430	4211	\$6592	\$27000	\$1300	147470
Ponfield,	2842	826	1936	5746	3336	49022	36812	23947	61648	2349	6186	1884	4776	4992	6225	3 550	2200	98600
Perinton,	2512	747	2239	6208	2933	67489	31773	24112	43 61	2738	8461	1472	9336	3192	581	18500	1000	28490
Brighton,	2337	689	1313	4223	2210	33589	21397	15717	49150	3226	1300	3732	6489	3929	2295		500	7700
Webster,	2235	668	1964	2741	2333	35047	27998	21945	41066	2823	6129	1145	8676	4122	6094	3000	2000	15025
Henrietta,	2085	776	2146	9559	3 41	79446	33866	22646	31120	3851	2006	2247	8411	5168	5008	30000	4500	
Pit sford,	1953	639	1531	5195	2349	48009	19669	14225	21007	2100	2875	61	6689	4260	2691	33900	1000	26000
Rush,	1929	673	1690	7209	6769	6769	25451	19457	20531	2195	13190	1153	4020	2645	3187	10500	300	21200
Sweden,	1884																	
Brockport,	1249	841	1778	7690	3777	61602	32899	21136	26204	2441	16860	1580	8967	3714	5172	57000	4070	23400
Clarkson,	3186	1103	2261	9776	5161	71865	44436	33853	52133	3153	1635	1331	12358	2980	7786	1600	1290	11400
Ogden,	2404	768	1663	7813	3104	60006	29892	22710	34956	2183	21245	2633	8125	3168	5724	1800	1200	7450
Parma,	2652	823	2467	7104	38 6	48688	38774	24975	43795	3127	12669	957	11493	2801	5445	11200	1550	32500
Greece,	3669	986	2559	6791	3859	60349	31080	28606	69253	3637	7018	10074	14624	6656	4696	5400	470	4355
Wheatland,	2871	753	1739	9849	3016	606229	17529	22631	19373	2250	2327	1667	6184	3063	3160	45900	4075	251250
Riga,	1983	774	1637	12354	3517	79117	25826	20012	24668	2065	21175	1619	6385	3382	4650	11000	1000	6410
Chili,	2171	789	1929	8666	3074	67475	35904	21313	32692	36 5	9406	1873	9272	4816	4114	18500	760	31232
Gates,	1728	493	1042	3293	1712	36390	16319	13926	4 001	2220	208 6	7859	40 11	2964	1550	1000	850	715082
Truandquoit,	1352	329	725	1507	1100	1 067	6676	11180	22895	1233	740	4506	2446	1222	536			3600
Rochester,	20129	3139	1506	892	3281	18158	11819	11705	24440	1498			5580	1920				1581975
TOTAL.	64561	12992	32071	127465	51243	1041408	497869	398 8	677624	48715	179601	41267	176114	69716	81288	329950	28375	2570627

For the New Genesee Farmer.

Agricultural Societies—Legislative Aid.

MESSRS. EDITORS—The increased circulation, and great improvement, of our agricultural journals, and the formation of the numerous agricultural societies, with their splendid exhibitions, the past season, afford cheering evidence that the cultivators of the soil, are beginning to realize the importance of useful instruction and practical improvements.

I am also glad to perceive that farmers begin to think it is time for the Legislature to assist them in the laudable work of improvement. I am not strenuously respecting my individual views, but it is my present opinion that an agricultural survey of the State, would meet with less opposition, and perhaps be more generally useful at present than appropriations to county societies, *provided the societies can be sustained without such aid*, but if they cannot be otherwise sustained, then, I say, the sooner such aid is obtained the better; for I consider their support *very essential to agricultural improvement*.

I am aware that many objections are brought against our societies, and some of them not without reason. I do not suppose it is possible to conduct them in such a manner as to please all; but it appears to me that some plan can be devised by which many of the most serious objections might be removed, and the usefulness of the societies be made more general and extensive. It is my opinion that premiums ought never to be given for single acres of produce, unless for the purpose of introducing some new production; as it too frequently withdraws the attention of the farmer from his other crops, and the large amount of the premium crop when compared with average productions, often causes doubts as to the correctness of the statements; and the love of preeminence often causes the unsuccessful competitor to feel dissatisfied.

If we can obtain Legislative aid, our societies should be remodelled; and I will now suggest a plan for the purpose, in hopes that some able pen will improve it, or propose a better.

Respecting the amount which the Legislature ought to appropriate, I am of the opinion that \$200 for each member of Assembly would not be too great a sum for the Empire State to bestow for the encouragement of productive industry; and it ought not to be for less than ten years. Each county society ought

to raise a sum equal to that which is received from the State.

I would suggest that each county society consist of the usual officers, together with a publishing committee; to hold annual Fairs for the exhibition of stock, productions, implements, and domestic manufactures; but no premiums to be awarded to individuals at the county Fair—the towns only to compete. The money received from the State by the county, to be divided among the towns, according to their ratio of population, provided they raise an equal amount by voluntary contributions, and conform to the requisitions of the law. Each town to form a society auxiliary to the county society, to consist of the usual officers, together with a viewing committee of three, whose duty shall be to examine the farms and crops in the town, at least twice in each season, and make an annual report of their inspections, to the county society. These reports should contain, as far as practicable, an agricultural survey of each town; and the committee men should receive a compensation for their time. Each town society to hold an annual Fair, at least one week previous to the county Fair, and to award premiums to those who raise the greatest average crops, and to the persons exhibiting the best stock, &c., as usual. Each person receiving a premium at the town Fairs, to be required to attend the county Fair; where the towns, and not individuals, are to be competitors. Each competitor to give all necessary information as to raising, breeding, &c., as usual, and all the statements and reports to be handed to the county committee for publication.

Any towns neglecting to raise the necessary amount, their quota of the public funds to be distributed among the other towns, but any town raising part of the sum required, shall be entitled to an equal amount from the public fund. Any county neglecting to comply with the requisitions of the law, of course the money would remain in the State treasury.

I think the foregoing plan would remove many of the objections which are made against our present societies, and would bring the improvements more generally home to each cultivator. If the towns would wisely co-operate in the plan, there would be splendid county exhibitions.

I hope others will communicate their views on this

subject, in order that the best plan may be devised and adopted.

Respectfully yours,

W. GARBUT

Wheatland, January 22, 1841.

Remarks.—The plan proposed by our este correspondent, embraces many suggestions deserving of consideration; but we apprehend that a difficult which he alludes in his closing paragraph, will some years at least, prevent the possibility of its successful application. There are not a sufficient number of spirited farmers in the majority of towns, to carry out their co-operations. The plan is new to us, however, and we hope to hear from others on the subject.—Eds.

Hoof Ail.

We wish to call the attention of our correspondents, whose communication on this subject appeared another column, to an experiment reported in eighth volume of the old Genesee Farmer, page 10, by Heman Chapin, of East Bloomfield. A horse which had been slightly affected with hoof ail, but nearly recovered, was fed (mixed with bran) one day of the ergot of spear grass, which had been fully obtained and cleaned for that purpose, and had eaten a bushel of it. It did not produce the expected effect on his health, although often closely examined. On the 18th page he will find account of several cattle affected with the hoof ail, which were fed wholly on corn stalks. These, the fact we have often observed, of cattle eating the winter through, which contained vast quantities of ergot, without being at all affected, serve to throw doubt on the opinion our correspondent expresses. The remedy he proposes, of sawing the hoof, we have found the most effectual of any tried. The remedy of H. E. Hubbard, following his communication, given from the Cultivator, we presume applies to the "foul in the foot," a disease quite distinct from the hoof ail, and which is also cured by the application of hot tar, which is done by rubbing a hot iron dipped in tar, between the claws at the upper part of the foot.

Market for Cocoons.

We are asked if there is any market for cocoons in this vicinity. If any person is desirous of purchasing them, we should be glad to be informed of it.—Ed.

MAGAZINE OF HORTICULTURE.
and all useful discoveries in Rural affairs—
by C. M. Hovey, Boston—40 pages,
only—\$3 per year. M. B. BATEMAN, Agent,
New York.

I have received the first number of the 7th volume of this excellent Magazine, and observe the editor justly calls upon the friends of horticulture for a share of patronage. We apprehend that nothing so important of a proper knowledge of this work can be receiving a liberal support. It is the only of the kind in the United States, and will probably be a comparison with the most popular magazine in England (which it very much resembles,)—a nurseryman and professed florist, it will be indispensable to a knowledge of the various improvements and discoveries which are constantly made. And the amateur gardener or florist will find it a zest to these delightful pursuits.

I extract the following article from the January

Horticulture in Western New York.

Now two years since any report was given in this Magazine, respecting horticulture in Western New York; and, although we cannot boast of any advancement, we are unwilling that old General should be quite forgotten in your annual retrospection. A few years ago, it was thought that a section of country would make rapid progress in horticulture and ornamental horticulture; but a cloud of adversity came over our prospects, and we were obliged to confine our attention to the necessities, and neglect the luxuries of life. It is believed, however, that a brighter day begins to dawn, and prosperity again smile upon us; so that we still hope to see the fertile region become as celebrated for its attainments in horticulture as it now is for its natural beauties.

Time and space, at this time, will only allow me to say a few words at a few of the principal gardens, and I shall only make remarks to those which have green-houses. In Rochester, the green-house and nursery establishment, commenced in 1834, by Reynolds and Son, is now owned by Messrs. Ellwanger & Son, who have removed it a little out of the city, to Hunt Hope Cemetery, where they have purchased a piece of ground, and erected a good green-house and hot-house, which are already well stocked with plants. Mr. Ellwanger has imported some fine Camellia, Cactae and camellias, from his native Germany. They are making arrangements for an extensive nursery, and if industry and skill insure success, these young men will surely

nursery of Mr. Asa Rowe, six miles from Rochester, is the oldest and most extensive in this vicinity. Mr. Rowe has a large green-house, and a good number of comestible plants, but, owing to the smallness of the place, he has not added many new plants to his assortment of late. His attention is mainly devoted to the growing of fruit trees, of which his collection has been extensive.

Mr. William King has erected a small green-house, in 1841, the past summer, and made a good beginning in things considered.

It is not yet two years since one of our private green-houses, situated near the city, had its plants in fruit.

Mr. S. O. Smith, a gentleman of wealth and energy, is now erecting a fine dwelling-house, and building a conservatory next year; when that done, others will doubtless follow his example.

At Hunt Hope Cemetery deserves, at least, a passing notice. Many improvements have been made there the past year, and in summer it is a place of great beauty; but now, it is desolate and gloomy, and so it ever be, during more than half of the year. Unhappy citizens take example from your own Monument, and interperse it liberally with evergreens, and ornaments of which we are sadly deficient.

In Buffalo, there is no perceptible improvement. Mr. J. H. Smith, Esq., the great patron of horticulture, died last year, and the improvements which he had projected and commenced, have been discontinued and abandoned. His stately mansion is unfinished and unoccupied, and the garden, and fine range of horticultural buildings, give evidence of the loss of that mass of talent, of whose taste and liberality they are now monuments.

Nursery establishments of Messrs. B. Hodge, and A. Bryant, appear in a thriving condition.

They both have green-houses attached, but complain that the sale of plants is quite limited.

The good people of Buffalo are fond of display, and take great pride in building large and costly houses, but do not seem to regard horticultural embellishment, and, consequently, they waste their wealth without producing the desired effect. If they studied the matter aright, they might save thousands of dollars, and, at the same time, display far more real taste and beauty about their dwellings.

At Batavia, the garden and green-house of D. E. Evans, Esq., are, as usual, kept in good order, by Mr. Logan, the planter. This is one of the oldest gardens in this region. The collection of fruit, &c., is of the very best description, but the assortment of plants is rather ordinary, not having enough of new and rare kinds to make it interesting.

At Genesee, a green-house and nursery were erected the past year, at the beautiful residence of the venerable James Wadsworth, Esq. The green-house was erected for the gratification of Miss Wadsworth, who has fine taste for botany and horticulture, and has already obtained a good assortment of plants, including some rare kinds. With her good taste and ample means, it may reasonably be expected that her collection of plants will, in a few years, be superior to any in this section of country.

At Canandaigua, the green-house of John Greig, Esq., is in excellent condition. The plants are mostly of common kinds, but many of them are very large and beautiful. A striped agave (Agave americana var. variegata) is the largest of the kind that I have ever seen, and Mr. Greig says he intends to take measures to bring it into flower, if possible.

Capt. S. Meentebe, residing near Canandaigua, sent some very beautiful oranges and lemons of his own raising, to the fair at Rochester, in October, but I have not had time to visit his house, or obtain information respecting his plants.

There have been no horticultural exhibitions in Western New York, this fall, except in connection with the agricultural fairs. We hope to give a better account of Rochester next year.

M. B. B.

Rochester Dec. 21, 1840.

"Books never make Farmers."

A number of our readers have very justly objected to some positions taken in the article in our last number from the National *Aegis*. The article contains many excellent remarks, but the assertions are not strictly true, that "books and learning will never make farmers;"—"that to be a farmer, a person must [necessarily] begin when a boy."

Experience, it is true, is essential; but we have known instances where farmers, not educated as such, have acquired from one year's practice, more knowledge of the operations of farming, than others have through twenty years of apprenticeship. Indeed, some of the very best farmers we know of, spent the early period of their lives in far different pursuits. "A long life, without industry, attention, knowledge, and judgment, is insufficient to make a good farmer; but with these requisites, a few years will accomplish wonders. Every kind of knowledge which tends to expand the mind, tends also to improve the judgment, and enables us better to perform any kind of business whatever.

We wish to be distinctly understood,—a mere load of the memory is not knowledge. The objection

* One instance, out of many which might be given, is that of Judge Ruef, which is doubtless familiar to many of our readers. A few weeks before his death, he made the following remarks, which we wish every one who has an aversion to "book farming" would read. "Bred to a mechanical business, I took up Agriculture, more than twenty years ago, as the future business of my life. Written at the precocious or consequent which we are all apt to acquire in the long practice of business, I began farming with a consciousness that I had every thing to learn, and that the eyes of my neighbors would be quick to detect faults in my practice. I at once, therefore, sought to acquire a knowledge of the principles of my business, and of the practice of the most enlightened and successful farmers. These I found in books and agricultural periodicals; and by these I have been greatly benefited. Although it does not become me to herald my success, I will venture to say, to encourage others, and particularly the young, in the work of self-instruction and improvement, that my lands, which are light and sandy, and which cost, in an unimproved state, thirty dollars an acre, are now worth two hundred dollars an acre, for farming purposes; or in other words, that the net profit of their culture, exceeds the interest of two hundred dollars per acre."

made an often,—of the necessity of school learning in the common affairs of life,—is valid only in relation to the learning which young people acquire, but do not understand—which they commit to memory but do not know how to apply in practice. It is valid rather in case of superficial, than of thorough knowledge. If our public schools were more occupied in teaching the application of learning, than the mere theory; and directed the attention more to the art of living, than the mere art of remembering, most of the objections made to them in this respect would fall to the ground.

Robins vs. Meslinocks.

MESSRS. EDITORS—Having noticed the statement of Mr. P. Briggs, in the last number of the Farmer, and wishing to induce him to "try again," I will inform him that I raised 37 bushels of Robins the past summer, on 9 rods of ground, which is at the rate of 657 bushels to the acre, and an increase of 98 fold on the quantity planted. On comparison, it will be seen that my robins yielded 134 bushels per acre more than Mr. Briggs' meslinocks.

Now, if friend Briggs will make another trial with me, and publish the result through the columns of the New Genesee Farmer, I will acknowledge it if beaten.

A FRIEND TO AGRICULTURE.

Danby, Tompkins co., Jan. 13, 1841.

Another Small Crop.

MESSRS. EDITORS—Your last paper contains an account of a large crop of Potatoes. With your permission, I will give you an account of a small crop.—About the middle of last May, my father had a small Roben potato given him, weighing 2 ounces. This he cut into 18 pieces, of one eye each, and planted them in 9 hills. On the first of October he dug from the 9 hills, 1 bushel and 10 quarts, which weighed 78 3/4 pounds; being an increase of 650 to one.

In order that my father may be able to raise a larger crop next season, please send him the New Genesee Farmer for one year, addressed, Horace Fowler, Hunter, Jackson co., Michigan. Yours, &c.

T. F. F.

Stabling Milk Cows.

We have been much surprised, at the increased quantity of milk cows afford from being stabled in winter, which some recent experiments have proved. A near neighbor suffered his cows, from necessity, to run in the open air, during the early part of winter, and, as usual, their milk greatly diminished in quantity, although they were well fed on hay, and mangel wurtzel. He then stabled them, without changing their food, and taking care of course to give them plenty of clean litter. He lately informed us, as the result, that his cows now gave just double the milk they did when exposed. A similar experiment by the writer, has proved nearly equally successful.

How to keep a Village Cow.

Transplant sugar beets 15 inches apart, like cabbages, but with more care, in every spot or space you can spare in your lot or garden. If the land is worked well and early, they will tend themselves after two or three light hoeings, and grow large enough to make a mess each, with the addition of a quart of shorts seasoned with ground oil cake. Here is sugar, gluten, starch and oleaginous matter to boot. With such slops, a cow needs nothing but a little straw. S. W.

RATS. A writer in the N. E. Farmer has effectually prevented rats from gnawing holes in the wood work of his house, by pouring upon places where they were at work, a strong decoction of Tobacco. They will not eat wood saturated with Tobacco. Many will honor their taste.

Sketches of Travel.

Nacport, R. I., July 1.

Here we are at A. C. M.'s delightful cottage. For me to attempt to describe the measure of my comforts and pleasurable sensations here, would be labor lost. I have been within higher and more massive walls, where the decorations of man's invention spoke more worldly splendor; but here, in the midst of Nature's magnificence, there is in union with it, in this house, a chastened simplicity and neatness of arrangement truly admirable. Our unpretending hostess is one of those intellectual females who regulates her mansion with noiseless efficiency. If her rules partake of the self-denying discipline of that society, in which she is a "bright and shining light," even the more worldly of her inmates are too well bred to wish to infringe them.

But who can, in this delightful spot, desire the sound of factitious merriment, the gross amusement of mere sense? Sufficient for me was the all-subduing influence of Nature's charms. Every morning at day dawn, I opened my chamber windows and set ajar the blind to look out upon the old shingled wind mill, Brindley's little pond and old rope walk, the narrow-walled lanes and neat little fields, where I had so often played in my boyish days. The deep continuous roar of the breakers on Easton's beach, was now more audible than at any other hour. I felt that this same reverberating roar was the music of my boyhood—forty years had neither impaired its freshness nor its power.

"States fall—arts fade;
But Nature doth not die."

At the close of this day, while sitting in the front piazza of this delightful cottage, looking down upon the quiet town below, and the resplendent bay and islands beyond, I saw some half a dozen chaises, accompanied by two or three modern buggies, returning from a ride of pleasure on the island and over its beautiful beaches. Each vehicle held a lover and his mate, as if mystified by the tender passion, or perhaps only with feelings imbued with the power of Nature's more magnificent attractions, the whip cracked not, and the horses trotted lazily along. How different is all this in Western New York. There our young people bundle into one or more large carriages or carryalls, drawn by two or four of the fastest trotters. John like they drive—all is life and noise and nonsense—putting the horses to the top of their speed, as if to annihilate time and space to the manifest jeopardy of life and limb.—This, said I to my wife, speaks the difference between the Yankee and the New York character. The one is economical, even in his pleasures; the other loves stronger excitement, he even carries his enterprising spirit into his amusements.

Sunday morning, went to Friend's meeting. This venerable house, with all its accompaniments, reminded me of other days, save the absence of those hoary heads which now "were not." Here was no longer a D. B. or C. R. on the high seat; no T. R. with his full bottomed whig below; no G. W. with his huge ivory headed cane, on the high seat in the wing. This huge wing was also razed, and gave a concession to the republican feelings of these after times; but the same ponderous oaken beams supported the quaint looking roof, the attic and the galleries. This unity of strength and plainness, a work of the 17th century, carried a sentiment of reverence with it.

I have sometimes heard apparently thinking men complain of the irksomeness of the hour spent in the silence of a Quaker meeting. I can only say, let such an individual take up his cross for this single hour. If he is poor, let him take to himself the

rich promises of that Gospel, which was in the beginning preached, first of all to the poor. If he is rich, let him employ this brief hour in examining his own heart, to the end that he may not incur the penalty pronounced against the rich man, hardened in sin and selfishness.

In the afternoon, we went to old Trinity. The congregation large, fashionable, attentive. The evening service was read by the venerable Dr. W., with a pathos and unction suited to the holy purposes of its office. What contrite heart will say that these forms of glowing piety, framed by the saints of old, are a "killing letter"? If such an one there be, may he be compelled to listen a full hour to the dull sermon of a man who has no reverence, no spiritual nature in him.

The subsoil of R. Island is dark clay, but unlike the clayey regions of the West, it is here intermixed with stone and gravel, and so compact as to be very difficult to excavate. On the surface small boulders of slate, flint, and granite, abound. The upper stratum is also relieved by sand or gravel. At the North end of the Island, below the schistous formations, anthracite coal is found; but it is more friable, and of course less valuable, than the anthracite of Pennsylvania. The predominant rock is coarse gray wacke slate: it bounds the head lands at the South part of the Island, forming with its thick annual coat of rock weed, an impenetrable barrier to the ocean's increasing surge. Also at the South part of the Island, there are valuable quarries of building stone, and some few ledges of irregular granite, too full of seams for such uses. I know of but one ledge of lime rock, and this is principally under water at high tide. It is coarse in texture, and nearly white; bearing little resemblance to our own deep blue fine grained carboniferous variety. But if Nature has furnished us of the West with her more fertilizing fossils, limestone and plaster, here she dispenses her blessings in another shape, with no niggard hand. Here the everlasting ocean not only yields its vast shoals of the oily muckladen fish to the net of the fisher, but every eastern gale drives to land an endless variety of marine vegetables and shells, in such abundance as to furnish both lime and vegetable matter to the grateful soil.

Indian corn, rye, oats, and barley, are the principal grains grown on the Island. It is said that in an early day wheat grew well on the opposite Island, Conanicut. Hence its present failure may not altogether be attributed to the influence of the sea fogs. Grass seemed to me, at this time, July 1, to be the most promising crop. Such Timothy (Panicum pratense) now in full bloom, I rarely ever saw in the dry, hot, champagne West. The Locust, (Robinia pseud-acacia,) together with many other ornamental trees, do not thrive well on the Island. The Buttonwood (Platanus occidentalis) is the only ornamental tree which seems to thrive gracefully here. Perhaps the pure damp sea air is quite as congenial to it, as the mephitic vapours of the Western creek and river bottoms. S. W.

Gardening for Ladies.

The accompanying amusing and instructive observations are taken from an excellent article in the Gardener's Magazine, entitled "Instructions in Gardening for Ladies," by Mrs. Loudon:—

To derive the fullest enjoyment from a love of flowers, it is absolutely necessary to do something towards their culture with their own hands. Labor is at the root of all enjoyment. The fine lady who has a nosegay put upon her table every morning by her gardener, has not a tenth of the enjoyment from it that the lady has who has sown the seeds, or stuck the cuttings, and watered and shifted, or transplanted, pruned and tied up, or pegged down or thinned out the plants, and at last gathered the flowers herself. But

we would have ladies of leisure do a great deal than this. Let them hoe, and rake, and dig, wheel a barrow, and prune and nail wall trees, i. e. a syringe, and work one of Reed's garden engine. By these, and similar operations, they will be healthy, without which there can neither be good nor any kind of enjoyment whatever, men or women. The grand and all pervading evil of ladies of independent fortune, is *ennui*, which, body knows, is brought on from a want of rational active operation. Now the pursuits of botany, gardening supply an occupation which is at rational and active; and they supply it not to the lady who has merely a love of flowers, but a scientific knowledge of botany or a taste for the arts of design, and who may, therefore, cultivate her flowers, and perform her garden operations, to a greater exertion of mind than is required in the gardener's labor; but to the scientific lady, whose natural knowledge, like that of the scientific gardener, may enable her to raise many kinds of flowers, and culinary vegetables, by the different processes required for that purpose; and to the lady of artistic taste in drawing, painting and sculpture, who direct her attention to landscape gardening, and especially, to the designing of flower gardens, and introduction in them of the various kinds of elements of which they are susceptible; a subject of interest as much in its infancy as botany was before the time of Linnaeus. But, says some of our readers, "What, the Duchess of ——— wheeling a barrow and nailing wall trees?" Yes, certainly, if she nothing else to do, that will be an occupation as active and rational. Why not a Duchess as well as a plain mistress? Suppose this Duchess an English noble, and that you are not aware that she is a lady. Suppose her dress in the simplest manner were the Vicomte D'Ermenonville's wife and daughters in the gardens of Ermenonville,) what would there be then? Ladies of rank are as much subject to *ennui* as ladies without rank; and every day, as well as every gentleman, has a portion of that day that she can call her own, when she may find in what she likes. If she has not, her life is worth keeping. Did not the Earl of Chatham, notwithstanding his being prime-minister at a period most important that ever occurred in the annals of country, find time not only to lay out his own ground but to assist Lord Lyttelton in laying out Hagley? We insist upon it, therefore, that what we propose is just and suitable and necessary for ladies of the high rank as it is for those without rank, provided they equally without active and rational occupation of any other kind.

The following excellent communication deserves an attentive perusal from every mother and daughter in our land; and in behalf of our fair readers, tender FANNY many thanks. At the same time think she has mistaken the meaning of ANNIE and applies the *hickory* without real cause. We do not believe that Annette meant to "attribute the discontent and unhappiness of farmers' daughters to a mis-education, and put the blame on teachers and seminaries." In the communication referred to, she was only speaking of a *certain* set of daughters, not of the majority; and we think an attentive perusal of her several communications will show that she does not reason altogether "logical circles."—Eds.

Farmers' Homes, Wives, and Daughters.

MESSES. EDITORS—I noticed, in your December number, another chapter of grievances from ANNIE, but having had Thanksgiving, Christmas, and New Year days to attend to, (which are the climax of enjoyments in the country,) no time was allowed reply last month; and although I feel no disposition criticise, or drive my amiable *combatant* from the field, still I think a little sprig of *hickory* from *Walden Grove*, may serve to drive her from some of her logical circles.

In your July number of last year, she attributes the discontent and unhappiness of farmers' daughters to a mis-education, and puts all the blame upon teachers and seminaries. Now she says that teachers are

aries are made to bear the blame of "inconsiderate fathers!" but I think, if she keeps on, she will be round to the right point yet, and find that in the fully circle the mother is the law and testimony, and "like mother like child" will still be the motto.

would not pretend to say that there are not avaricious, penurious men, whose *wealth* consists in the accumulation of their possessions, and not in the enjoyment of them, and who would deprive their families of the comforts of life, that they may compound their greed or add farm to farm, to be considered rich in the eyes of the world,—or that there are not indolent or inefficient men, who, if they can be fed and clothed from day to day, care not how or whether. There are procrastinating men, too, who are never ready to do any thing in its proper time; but these I consider the exceptions to the general rule, and not that a majority of the farmers of our country, enjoying a competency," are of either class. But admit they are,—the mother, seeing these traits in the father, is the sole power of correcting it in her children: if she is a judicious mother, and understands the philosophy of human nature, she can do it without ever destroying the confidence of her children in their father.

It is from the mother children receive their first impressions of right and wrong. It is her voice that leads them their wayward steps during the day, and hushes them to sleep at night. If sickness comes, mother ways has a remedy—the natural qualities of every other ensure to her an unbounded influence over her children. Their character must also be formed in childhood. If they are to be virtuous, the seed must be sown in the spring-time of life. It is then the occupation is selected, taste is formed, habits contracted or principles planted—"as the twig is bent the tree's inclined,"—but it needs not the strength or power of syllogism to prove the assertion—the fact is self-evident—that these must be imbibed in early life, planted and nurtured by the hand of a mother. Her example written indelibly upon the table of their memory, and her peculiarities must serve as an infallible standard. Now, think ye, if the daughter has been educated to be industrious, and to bear her part in the duties of the family, and to be contented with such things as she may have, "working diligently" to improve her condition, whatever it may be,—that there is nothing "within or around" that home to make it lovely or attractive," and she, nevertheless, unhappy?

We will take a most extreme case. Take an uneducated man, devoid of a refined taste, an avaricious, envious man, and, if you please, let him be a peevish and a fretful man, who wants nothing but what will bring dollars and cents. He has a wife and daughters of refined taste, who like to blend the ornamental with the useful. Let the daughter go out early in the morning when she sees her father planting cress or cucumbers, and say, Father, I will drop your seeds for you, if, when you get through, you will help me put out a beautiful rose bush I got yesterday. Why, child, what is the use of all these roses and peonies around the house? they won't pay our debts or buy bread. I know they won't, father, but it won't take you but a minute to do it, and then it helps make the old house look so much better, and makes mother and the children so much happier when they see every thing around looks cheerful and pleasant; and this little Burgundy rose is mother's favorite, you know. I do not believe the most clownish, peevish, fretful man, could resist such an appeal from an affectionate daughter; for "soft words will turn away wrath," and love will beget love; and the unconscious father will not only set out the rose bush, but enjoy its fragrance too.

We will take a still more important case. Say they want a new fence around the house, and the house painted. The mother and daughters now say,—If father will let us have the butter and cheese we make this summer, we will paint the house and have a new fence, &c. But says the indolent, inefficient, procrastinating man,—Oh! we can't afford it; besides I want all the butter and cheese you can make, to pay for the new wagon and harness we have been getting. But says the daughter,—Father can have all the avails of the farm for that, only let us have the butter and cheese, and we will do without a hired girl, and do the work ourselves. He must be something less than a man, and a man with a competency too, who would not only yield to such wishes, but rouse from his indolence and procrastination, and do all he could to suit them; and I am confident that in nine cases out of ten, Annette will find, if there is nothing "within or around a country home calculated to please the mind, or delight the eye of an intelligent daughter," it is the mother's own fault. She has not brought up that daughter to industrious, frugal, and economical habits. She has sat her down in the parlor, a dressed up automaton, living and dressing upon the hard earnings of somebody; and whatever may have been her school education, her home education has been all wrong; and not possessing energy of character sufficient to rise from her indolent habits, she sits down to enjoy her ennui, dissatisfied with herself and every body else, and consequently unhappy. And if she were thirsting for knowledge, and the father unwilling to furnish her the means of allaying that thirst, there is not a literary gentleman in all the region, that would not delight to open his store-house of literature to feed a starving intellect; for in these reading days, nothing is more rare than an exclusive library.

Happiness has no locality. It is not the city or the country, the brick or the wood house, the mahogany or the pine furniture, the Brussels or the rag carpet, that can make a discontented mind happy, or a contented unhappy. Home, to a contented mind, will be home, and have its charms be it ever so humble.—If Annette will go with me, I will show her a happy country home—not a thousand miles from a city—where dwelt a father, mother, brother and sister. That home was truly attractive, and that daughter was a happy one. "She had much to gratify her taste, and call into exercise those faculties which afforded her the highest kind of enjoyment." She had "the fragrant rose, the climbing honey-suckle, the shady bower and the vine-clad arbor;" but her own hand watered and trained them. And when she would "luxuriate on nature's charms," she would ramble o'er her native hills, by the winding brook, the shady grove, where she could

"Converse with nature, and commune
With nature's God."

and never was she less alone than when alone.

There was much around that country home "calculated to please the mind and delight the eye." The birds from the forest came at her call; an old wren for years built her nest in a gourd shell that she hung in the well-curb, and her favorite robin when molested always knew that in her she found a friend to drive away her foes. She could feed the chickens or milk the cow; she could wash, or bake, or iron; all of which did not prevent her thumbing the piano, or "tripping the light fantastic toe," nor exclude her from the most refined circle in the city; and none enjoyed her rural home more than did her city friends. And there was much "within" to make that home delightful—there were happy hearts and cheerful voices, and the hospitable board that ever made welcome both the stranger and the friend—that home was truly attractive; but not more from the wearied and

care-worn father, than from the mother and their only daughter; and that daughter was none other than
Your humble servant, FANNY.

Walnut Grove, Jan. 11, 1841.

The Education of Females.—The proper training of Farmers' Daughters.

I like your correspondent Annette, much better than I do her antagonist "Home-spun Farmer," because, like a true woman, her errors are not of the feudal age. She says, "public sentiment, and the spirit of the age, now require that females of the rising generation, should receive a higher degree of education than was formerly deemed necessary."—In the depth of her sympathy with her sex, she might perhaps relieve them a little too much from the wholesome drudgery and petty details of domestic life, and suffer them to go a little too far into the more expensive refinements of the age; while, on the other hand, her antagonist, and his exponent, of the *Egis*, "Franklin," seem to forget that "man lives not by bread alone." They appear very much to dread that a female should be educated above her condition in life; but it does not seem to have entered their philosophy, that education, and a pious one too, can alone fit a woman to bear a right those ills which "flesh is heir to." Is it reserved alone to the wealthy to indulge in intellectual pleasures? Does not the honey suckle clamber as gracefully, and bloom as fragrantly, on the rough exterior of the log cabin, as on the piazza of the gayest cottage of art? Must every poor widow too, stifle the yearnings of a mother's heart, and compel her fatherless daughters to live in somebody's kitchen; to be hourly reminded, by unqualified command from the mushroom daughters of her mistress, of her hopeless servile condition? Did Franklin ever read the story of Cinderella? If he has, does he blame any fair, delicate young female, for shrinking from Cinderella's wrongs, even if she were certain of Cinderella's final reward? Franklin is so much a man of the past linsy woolsey age, that he seems to forget that the revolution which those modern improvements, the STEAM ENGINE, SPINNING JENNY, and POWER LOOM, have made in mechanics, calls for a correspondent social and moral improvement, and modification of labor and employment. He even limits woman's reading to five books, including the Bible. Annette might possibly err on the other hand; but we want to hear from her again on the subject of the proper training of farmers' daughters. Woman alone can do this understandingly—she is less an animal than man. It has been beautifully said of woman, "that in her rich heart, God more generously sows the divine germs of his holy religion;" though "she will sometimes sell her birthright for TINSSEL and the ADMIRATION OF DECEITFUL LIPS." Yet in the main, her purity of heart is "her strength, her loveliness, her primal excellence." Is she not therefore the only safe and legitimate teacher of her own sex? LUBIN.

SONNET. WINTER.

The scene, how changed! The winds of winter, wage
Eternal warfare with the leafless trees;
And morn and even, the elemental rage
Dulls the cold heart, as springs their channels freeze!
Where are the children of the woods! the trees—
The songs of birds that wake the woodland train?
All, all are gone, and like the locks of yore
The pendant icicle the woman sees,
And feels the blood run chill in every vein.
Season of cold! when round the ingle cheek
Young children gather, and the hoary sire
Looks o'er the assembled group, and feels the bleak
Cold land of death upon him, which the fire
Of youth no more will come, its icy spell to break!
London, U. C., Dec. 31, 1840. J. N.

The following communication is from the pen of one whose experience and learning entitles him to more than ordinary regard. We hope to receive further remarks from him on this all-important subject; and feel assured that our readers, who are parents, will find his suggestions deserving their consideration.—Ers.

Education of Farmers' Children--No. 1

MESSRS. EDITORS—I have not been wholly pleased with the articles on the *education of farmers' families*, which appeared in your paper in the last year. I approved many things; but some things appeared rather distorted, and others to be neglected or omitted. I thought, too, that mothers were censured beyond their proportion.

There are two prominent mistakes on this subject, which need correction. The one is the *notion that a farmer's condition is rather inferior*; the other respects *the kind and quantity of education*.

1. The first mistake is made and continued by farmers themselves. While the condition of the farmer is one of the most independent, and his profession as honorable as any, and far less annoying and inhospitable, and is far more free from temptation and passion, there is a constant effort to leave it and to engage in some other pursuit. The sons are often prepared for some other business; the daughters are educated for another sphere. All this tends to depress the notions of the usefulness and respectability of an agricultural life. True indeed, some of their sons must have a collegiate education, and engage in some of the more learned professions, and some of their daughter must be the wives of such men. But the great body of the sons must continue in the occupation of their fathers. While the men of the learned professions fill the more important stations, as a great fact, and the sphere of their influence is greatly enlarged, and while their pursuits may in one respect be allowed to be superior, in the general rank the farmer's place is important beyond estimation. If the other is considered as the eyes and hands of the system, the latter is the very backbone of the country. Without the latter, the former would be powerless and unnecessary. For this place their sons should be educated, and their daughters too, as this place they will chiefly fill. The worth, the dignity, the respectability, the usefulness, the security and independence of this place, should be known, acknowledged and felt. Then will the *action suit the thought*.

2. The second mistake comes more within the scope of education. The *kind and quantity* of education, is material. In the lower class of farmers, both sons and daughters have only very ordinary advantages. In the highest class, which is not large, both enjoy nearly equal means. In the middle and great class, the daughters have far the greatest advantages. The reason is, that the sons are *needed* on the farm in the summer, and cannot so well be spared in winter. The daughters therefore attend the select schools and academies for a much longer period than the sons, and having equally active minds, they study to better advantage and make greater acquisitions. They become more delicate and refined in their manners; they see and hear more of the world; they are able to converse and to show off to greater advantage. They have, in fact, far more of cultivation to show off, and far more of that which will be interesting to society. Hence it is that they are raised above their brothers, and will naturally seek the society of those who have more original acquisitions. The sons of farmers are thus thrown into back ground, marooned, repelled. They wonder at a state of things over which they have no control, and the daughters are often blamed and reproached for not finding their pleasure in the society

of those who have not been educated so as to be on an equality with them. Hence it is that many a young farmer is obliged to find a wife among those daughters who are not quite on his own level, and who are not so well fitted for their place as he is. How often a farmer's son is sent to a higher school for *one quarter*, and then he must be upon the farm. He has hardly been able to get well employed in study, when he must leave, till another season will give him another quarter. The daughter less rarely has only one quarter at a time for her improvement. She has not indeed enough of time for improvement; let her not have less; but let the son have more, much more.—However much the sister may have, let the brother have far more means of education. Farmers' sons need to be raised in the sense of their qualifications for usefulness, and enjoyment on their farms, as well as for influence in society. Then will their wives be raised to a higher character also, and a nobler generation will appear. When a highly educated female has allied herself with a young farmer of good talents and disposition, of activity and enterprise, though he may have less of education and refinement, because he has not been able to acquire them, who has not seen with delight the plastic power of the wife in moulding and elevating and refining her husband. She becomes in a two-fold sense, a *help meet for him*. "She looketh well to the ways of her household, and eateth not the bread of idleness. Her children rise up and call her blessed; her husband also, and he praiseth her."

D. C.

ENGLISH MARKETS

London, January 4, 1871.—A great improvement has taken place in the manufacturing districts. Cotton goods especially have been in very active demand, and at advanced prices. The money market is also assuming a more healthy tone. So that with moderate stocks of produce generally prospects are favorable.

CORN MARKET.—Average price for Wheat for the last six weeks; for the week ending Nov. 20, 11s. 6½s. 3d.; 27th, 60s. Dec. 4th, 29s. 7d.; 11th, 28s. 10d.; 15th, 30s. 1d.; 18th, 60s. —Aggregate for the six weeks, 59s. 10d.—duty 27s. 3d. The arrivals are pretty large. English wheat is saleable at the currency of a fortnight ago; 1d. 6½s. 6½s. and, white, 6s. 7½s.

LIVERPOOL CORN MARKET. Jan. 2.—American Flour, free, has sustained late rates, but has been rather slow of sale; the best markets of United States at 36s., Canadian at 37s. to 38s. per bbl. A little United States has been sold, in bond for export, at 35s. per bbl.

January 4.—American Flour, in bond, 25s 6d. & 36s, but these prices could not be relied upon in the face of large importations. American Wheat, in bond, 5s 3d. & 5s 6d. per bushel.

NEW YORK MARKET—JAN. 27.

CORN EXCHANGE.—Flour was held firmly through most of the week, but the news from England was unfavorable, and

day holders were ready to sell, but there were 554 bids. A few were however to

day for 100 bushels, or \$1.10 per bushel. Georgetown sold 100 bushels of small parcels of Howard street in Baltimore City at \$3.25, and some New York at \$5; 9000 Brandywine at \$3.50. Corn Meal sold in pouches at \$3.15, and in bags, at \$2.50. Rye Flour at \$3.37. In wheat the only parcel sold was 2500 inferior Long Island at about \$5.15. The rice is considered tolerable. Venice wheat, say 1000 bushels, in store, held at 14 cents. The flour of Rye is sold at 10 cents. A very handsome Delaware Corn was sold on Friday at 57 cents per weight, but a very fair article was offered afterwards at 55 cents. The distillers buy Long Island Corn at 56 cents. Northern Oats may be quoted at 42 cents; Pennsylvanian and Jersey at 31 and 36 cents; Southern, 34 and 31 cents; Barley is held in store

PROVISIONS.—Beef and Pork are abundant and very heavy. Prime Pork especially droops; there were sides at \$.25 and of MESS at \$12.50, and more is offered at the same rates. 2100 kegs Ohio Lard were sold at 7c. lb., another lot of about the same quantity is held at 7½. Smoked Meats, Butter and Cheese are without change.

SEEDS.—Flax Seed is dull; 70 tierces of Clover have been sold at 84 cts. lb.

MONEY AND EXCHANGES—Money has been rather more plenty since the resumption to Philadelphia and the considerable sums received there. The Banks discount all the satisfactory business paper which is offered them, and on the whole, money is very little poorer in the street. Bills on France and England were heavy through most of the week, owing in part to the large sums drawn for by the U. S. Bank. There are no arrangements now making for the shipment of gold to the United States, and the market is not likely to be so much better as it was a few days ago. The rates of Domestic Exchanges improved on the whole, and did Money Stocks

BUSINESS GENERALLY.—It will be seen that a good degree of activity has existed in several of the articles mentioned in this Review, and there is a healthy feeling pervading the market generally. The importations of manufactured goods are quite large, and the sales by auction are commencing on a large scale. The merchants generally are successful in their efforts, and so confidence is increasing from month to month.—*Your, Com.*

Errata.

Besides several unimportant typographical errors in the January No., the following have been noticed as affecting the sense.

On page 2, col. 1, 6th line from bottom, for *pippins* read "*Pippin*." Same page, col. 2, 25th line from top, insert the "*Kentish*." &c. Same col., 11th line from bottom, for *Cretian* read "*Chretien*," Page 12, col. 2, line 7 from the bottom, for *yields* read "*yielded*." Same page, col. 3, line 6 from bottom, for *particular trees* read "*particular trees*." Page 13 col. 2, line from top, for *forest, where* read "*forest. Where,*" &c

ROCHESTER SEED STORE--1841.

THE subscribers have made complete arrangements for furnishing all kinds of SEEDS from this establishment as usual. Large importations have been made, in addition to the supplies raised in this country. No pains will be spared to have the Seeds of perfect quality, and give satisfaction to their customers. Agents will be supplied, as usual, in the principal places of Western New York—Particularly in the next month.

BATELHAM & CROSMAN.

MOUNT HOPE GARDEN & NURSERIES

ST. PAUL STREET.

ROCHESTER, NEW YORK

THE Proprietors of this establishment offer for sale an extensive assortment of Fruit and Ornamental Trees, Flowering Shrubs, Green House Plants, Bulbous Flower Roots, Double Dahlia, &c. &c.

Gardens laid out, and Gardeners furnished on reasonable notice.—Persons requiring information on any subject connected with the business, will receive a prompt reply.
All orders, letters of inquiry, &c. must be addressed (post paid) directly to us.

Trees, Plants, &c., will be carefully packed, so that they may be carried to any part of the country in safety; and packages will be marked and shipped as may be designated in the order.

Persons with whom the proprietors are unacquainted, are requested to give a satisfactory reference, or name some person in the city of Rochester, who will guarantee the payment.

ELLWANGER & BARRY.

TIMOTHY SEED WANTED, At the Rochester Seed Store,
BATEHAM & CROSMAN.

ROCHESTER PRICES CURRENT

CORRECTED FOR

THE NEW GENESEE FARMER, FEB. 1, 1946.

WHEAT, per bushel,	\$ 78 a \$	81
CORN,	37 1/2	41
OATS,	22	25
BARLEY,	39	
RYE,	50	
BEANS, White,	75	
POTATOES,	19	23
APPLES, Desert,	38	41
" Common,	25	31
" Dried,	75	89
CIDER, barrel,	100	150
FLOUR, Superfine,	4 25	
" Fine,	3 50	3 75
SALT,	2 00	
PORK, Mess,	10 00	11 00
" Prime,	8 00	9 00
" Hog, 100 lbs.	3 50	4 00
BEEF,	3 50	4 00
POLTRY, per pound,	6	
EGGS, per dozen,	15	
BUTTER, Fresh, . . . per pound	14	16
" Firkin,	10	13
CHEESE,	6	7
LARD,	7	8
TALLOW, Clear,	8	9
HIDES,	5	
SHEEP SKINS, each,	75	87
PEARL ASHES, . . . 100 lbs.	5 00	
POT,	4 50	
WOOL, pound,	35	40
HAY, ton,	7 00	8 00
GRASS SEED, . . . bushel,	1 00	1 50
CLOVER,	6 50	7 50
FLAX,	75	
PLASTER, (in bbls) per ton, 6 00,		
" bulk at Wheeland 3 00,		

Remarks—Our sleighing has nearly *evaporated*, and but little is doing in market. Wheat is purchased only in limited quantities for the retail flour trade. More is doing in Corn, Oats, &c., but at low prices. The Pork trade is nearly over: prices same as last month.

The money market is said to be much improved. A very large sale of Dry Goods, at auction, took place last week. It was well attended, and fair prices obtained.

THE NEW GENESEE FARMER.

A D GARDENERS JOURNAL.

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F. CROSMAN, Proprietors. } M. B. BATEHAM, Editors.

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Triumphant Success.

We congratulate the friends of this paper, on the
success which has thus far attended the 2d Volume.
We commenced the year with an edition of 20,000
copies, and some of our friends thought it was too
great a number, but present appearances indicate that
we were not mistaken; for if the friends of the cause
continue to exert themselves, as they have done the
past two months, this large edition will soon all be
circulated; and then who can estimate the amount of
good that our monthly messenger may accomplish?

Have patience with us. Owing to the flood of let-
ters, which daily pour in upon us, we are sometimes
compelled to defer attention to them for a day or two;
and sometimes (thought not often) names are not entered
correctly. We regret these evils and endeavor
to avoid them, and hope, therefore, our friends will not
accuse us severely, or tax us postage on their com-
plaints. Postmasters, when requested, will generally
inform us of inaccuracies.

Some of our subscribers complain that their papers
do not reach them till some days after the 1st of the
month. *We cannot help it.* We wish to obtain the

reports of the Markets, &c., up to the 1st, and there-
fore cannot go to press earlier. Then, notwithstanding
we use a Power Press, it takes quite a number of
days to work off so large an edition. The whole are
mailed as fast as possible, and should all reach the
subscribers before the middle of the month.

Post Masters and agents in Canada, who wish to
send us instructions respecting the direction of the pa-
pers, are requested to direct their letters to the Post
Master at this place; otherwise we are subjected to
postage.

Post Masters and Agents are particularly requested
to write the name of the Post Office, County, and
State. It is sometimes almost impossible to decide
what State the place mentioned is located in.

Uncurrent Money.

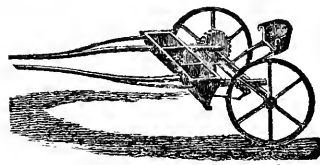
Bills on solvent Banks in this, and the Eastern
States, are at par with us Canada, Pennsylvania,
and New Jersey, are 5 to 10 per cent discount.—
Ohio, Indiana, Kentucky, and Illinois money, is 6 to
8 per cent; and Michigan is 12½ per cent discount.

We hope our friends at a distance will take pains
to send us the best money they can obtain. We do
not *refuse* any of the above, when sent us free of
postage, and nothing deducted for commission; but the
amount paid by us for discount during the year, is a
serious item.

Monroe County Agricultural Society.

By a notice in another column it will be seen that
the Genesee Agricultural Society, organized in this
city last year, and intended to embrace several coun-
ties, is now to be confined to this county, and called
"The Monroe County Agricultural Society." The
reasons for this change are numerous. When this
was organized, there was no society in Genesee, On-
tario, or Wayne counties, but now each of these have
societies of their own, and other counties are expected
to organize. Besides, it is expected that some aid
will be granted by the Legislature, and if so the law
will confine the societies to single counties.

The *Petitions* are daily presented to the Legislature,
and if any persons have petitions with signatures in
their hands, they should send them in without delay
No report has yet been made on the subject, but
doubtless soon will be.



Hatch's Broadcast Sowing Machine.

This machine has been exhibited at several Fairs,
and used on several farms in Western New York the
past fall, and has been spoken of in high terms of
praise. It is calculated for sowing all kinds of grain,
broadcast, and is particularly valuable for sowing lime
or plaster.

Mr. Hatch, the inventor, is now in Rochester, mak-
ing arrangements for building machines. We in-
tend to give a more particular account of it next
month.

"Rochester Seed Store Catalogue"—1811.

The annual Catalogue of the Rochester Seed
Store is sent as an extra with this number of the
Farmer, and should be preserved by our readers.
The agents named for the sale of seeds in other places,
will receive their supplies in a very few days.—Cata-
logues are sent gratis to all applicants.

Hints for the Month.

Every farmer should be able, if not already so, to
answer the following questions in the affirmative:—

Is your stove and other wood, for use next summer,
all cut and piled up or seasoning? And have you
plenty of wood seasoning for next winter's use? Are
your chips all collected and secured for fuel?

Are your tools, for the approaching campaign in far-
ming, all in first rate order?—your ploughs with good
points, beams sound, handles firm?—your rakes and
harrows with teeth, your hoes and forks with handles?—
your harness in good repair, and well oiled?

Are your tools all the best of their kind, so that the
additional work they will perform, will pay for them
several times over before next fall?

Are you provided as far as practicable against bor-
rowing tools?

Is there a place for every thing, and every thing in
its place, so that you need not waste the richest por-
tions of your time next summer in fruitless searches?

Are your farming implements all well painted where
needed, to preserve them from decay?

Are your fences all in good repair—loose rails laid
up—low fences made higher—board fences well nail-
ed—stone walls not tumbling?

Are your cellars kept clean and pure?—your roots
in them in good sound condition?—your apples kept
assorted, the decayed from the sound?

Are the water furrows in your wheat-fields kept
open and deep, so that you may not lose bushels
of wheat by the want of as many minutes work?

Are your grafts cut—the best kinds chosen—your
grafting plasters made?

Is the additional attention given to cattle and sheep,
especially to the latter, which this critical period of the
year requires?—the feed increased, the quality im-
proved?

Have you procured the plaster you intend to s w, so
as to have it on the grass early, that it may receive the
full benefit?

Are your farm and garden seeds all procured?
Do you understand the best way to make and save
manure—that steam engine of farming operations—
and if not, have you endeavored by reading and obser-
vation to find out?

Most farmers will perhaps be busy this month in
preparing to answer the above affirmatively, after
which we should be glad to make further suggestions.

Those of our readers who wish directions on gar-
dening for this month, are referred to the copious in-
structions on the subject given in this paper the last
year.

Board Fence.

There are three methods of making board fence, all of which without doubt are familiar to our readers; but our motive for describing them here, is for the purpose of comment.

The simplest kind is made by setting the posts, and nailing on the boards—nothing more. It is deficient in strength, and ought never to be adopted nor recommended.

The second kind is made by adding a strip on the top of the posts, which adds materially to the strength of the fence; but it affords no protection from the rain either to the nails or to that part of the boards that are in contact with the posts. In consequence of being thus exposed to the wet, the wood decays, the nails rust, and in a few years dilapidation commences. *

The best kind of board fence resembles the latter method, by having a strip on the top of the posts; but it reaches far enough in front to cover upright strips which are fastened by nails passing through the boards into the posts. These protect the joints and most of the nails from the wet. This kind of fence is not only very strong, but very durable; and not liable to get out of order if a nail or two should chance to be defective, as the upright strip must give way before the boards can fall down, or get out of place. The additional expense may be considered as insurance.

There is another kind of insurance however, that should not be forgotten: This is plugging the posts with salt. In 1824 William Phillips, of Philadelphia county, wrote to the secretary of the Pennsylvania Agricultural Society as follows:—

"In 1803 I planted four gate posts of Delaware oak, of very inferior quality; a two inch auger hole was bored through them, filled with salt, and plugged at both ends. As they were to support highly finished gates, they were cased with boards, and some salt put inside of the case near the ground. The posts are now as sound as when put down, and bid fair to last for some generations to come."

We should presume however, that posts already set, or to be set, would not require to be bored through, if the direction of the auger be properly gauged; and then one plug would answer.

Preservation of Woodlands.

In looking round the country, we find the most common management of wood-lands to be as follows: Cattle and sheep are allowed to range through them; and all young trees within their reach which they are fond of browsing, such as the maple, the basswood, or the elm, are effectually destroyed. Oak and hickory also suffer; and between being overshadowed by large trees and nipped by live stock, they soon become worthless and stunted even if they survive.

In the mean time the axe and the tempest are gradually thinning the primeval array of the forest. A sound tree is wanted for a sill or a beam; or the necessary supply of rails for the farm; and declining ones are prostrated by the storm, or cut for fire wood. As the residue stand more distant from each other, the leaves which formerly supplied an annual covering for the roots, are now swept away by the winds; the grass gets possession; and though young trees will often flourish in the open pasture, old trees which have always stood in the crowded forest, cramped and confined in their roots, are not prepared for the change; and the lot from a wood gradually becomes a shady pasture.

Yet it is necessary for landed proprietors to look forward to the next generation; and our advice would

* Some persons paint their fences, and then a part of this objection is removed. For farm fences, however, this process is too expensive; though sometimes those parts of the boards and posts that come in contact are painted—a very judicious precaution. If throwing hot nails into oil, prevents their rusting, a board fence is the very place to try them.

be: Inclose your woodlands, allowing no live stock to run through it that can damage the smallest tree; for though there may be a convenience sometimes in violating this rule, yet it will be paid for at a dear rate; and it will be cheaper to hire pasture of a neighbor even at a high price. Let this inclosure be sacred from all intrusion of the kind.

But large trees and small ones will not flourish together; and when large trees are felled there is frequently a destructive smothering among the juniors of the wood. When the farmer therefore wants rails and fire-wood, let him cut down a portion annually, say a quarter or a half an acre, sparing nothing that he finds on the ground, but let the axe and the brush-hook perform their respective parts. Even saplings will make durable rails, if cut at the right season—not of the moon but of the sun,—in summer, autumn, or the early part of winter; and then the young growth will have nothing to overshadow it. On the reverse, it will soon overshadow the whole ground, retain the leaves as they fall, and have their roots protected from the cold of winter, and the heat and drought of summer.

We believe it is not an uncommon opinion that oak, chestnut, or hickory lands, are the only kinds worth preserving for an undergrowth; but we have never seen a more thrifty wood than one that was principally maple, elm, ash, butternut, and basswood. The latter kinds indeed are more injured by cattle than the former; but when they have not been destroyed, and have a clear field, their growth is very rapid. †

Working Butter.

It has been a custom in our family, time out of mind, not to use any water in working butter, under the impression that the latter would be injured by such contact, and disposed to become rancid. Instead therefore of washing out the buttermilk, it is carefully worked out with a wooden ladle. The following extract from the account of the Holstein dairy system lately copied into the New Genesee Farmer, will explain the whole affair. We copy it again lest some of our readers might pass it without notice.

"The churning being completed, the butter is taken off by means of a large wooden ladle, and carried in a tub directly to the butter cellar, where, in a large trough, very smoothly polished off inside, and provided with a plug hole at the lower extremity, the butter is slightly worked, and salted with the purest salt; the butter moulded with a wooden ladle into a mass at the upper end of the trough, and left for some hours to drain. In the evening it is thoroughly beat or rather slapped."

"The butter in Holstein is seldom if ever washed, as water is believed not only to rob it of its richness and flavor, but as being itself susceptible of putrefaction," and inimical to the preservation of the butter.

* Volume 2, page 3.

Florist.

From Eaton's Botanical Dictionary modernized for 1840 we copy the following:—

"FLORIST. One whose employment is that of creating monsters; that is double and various colored; as carnations, double roses, &c."

Folks who are fond of queer things will be pleased with this definition; but those who look more gravely at such matters, may wonder how it ever found its way into a Dictionary of Scientific terms! They may even be inclined to think it not only vituperative but unjust; and unfortunately the learned professor has furnished his old friends with no evidence to the contrary.

As early as the year 1832, * we ventured to call his attention to this impropriety—for so we must consider it; and indulged the hope for a time that he had profited

* Genesee Farmer, vol. 2, page 77.

by our admonition. Were we mistaken? We will state the facts: Its tail has been snipped off, but the nucleus is left to shine with its original splendor.

Some sort of an apology might possibly have been invented, if the Dictionary had contained a notice of other professions, such as *botanist*, *horticulturist*, &c., but nothing of the kind has been found; and we apprehend that some will not resist the impression that he has run off the track to have a cut at vegetable "monsters."

A more serious view of the matter however may be taken. Was the learned professor in the line of his duty, as an *instructor of the young*, when he wrote that definition? It is a caricature, uncalled for, and unworthy of such a place. The true definition, which we copy from Webster, is as follows:—

"FLORIST. A cultivator of flowers; one skilled in flowers."

Field Beets.

A respected correspondent at page 23, ascribes the loss of his beet crop to their having been planted so late as "May 24th;" but we did not plant our Mangel Wurtzel (Vol. 1, p. 130) until about the 7th of the month following; and we think that if he had seen them a short time before they were gathered, he would have spoken more favorably of the beet culture.

There is a great difference between the labor necessary to secure a crop of potatoes and a crop of beets. In topping the latter we used no knife; but wrenched off the leaves with our hands—a much more expeditious way; and the beets scarcely required any digging. A great proportion of them came up very easily; and we filled our corn baskets long before a potato digger would have unearthed half the quantity.

That experiment of ours which ran counter to the opinions of some good farmers in several particulars, and succeeded in all of them,—has given us much satisfaction. The time of planting however, was later than we would recommend, except in a case of necessity like our own; but the exemption from hard frosts until late in autumn, was most favorable,—for they were not gathered till in the 11th month. In some years undoubtedly they would have been damaged by such exposure.

We think one cause of our success was in the scalding, which hastened the germination of the seeds. They were put into a vessel containing about two quarts which was then filled with boiling water, and left to stand for several days. Those who are afraid of hot water however, may use that which is only tepid; but we would earnestly recommend that the seed in no case, be planted dry or without soaking.

Another cause of our success was in using fresh manure from the stable in all its rankness; and we hope that the practice of our friend "SENeca" * on this point, as well as our own experiment, will remove all fears in regard to this important auxiliary. †

Trimming Orchards.

This is a very necessary and important operation. Large apples of the same sort are better than small ones, not only on account of the size, but the flavor is more perfectly developed,—especially when they grow well exposed to the sun and air. Our rule is, the higher the color, the higher the flavor, of that particular kind. Now when the branches become crowded and proportionately stunted, we have no right to expect fine fruit; and the only remedy is judicious pruning.

Writers have differed in regard to the best time of performing this operation, some preferring the winter

* New Genesee Farmer, volume 1, page 147. He would render our journal more interesting by using his own proper signature; and we earnestly request that all our correspondents do the same.

season, and some the summer. Both seasons are favorable, but the sooner it is done the better. If any farmer from indulging in theory should prefer the latter period, let him first consider how it will agree with his other business; and if it should appear clearly that he will have nothing to interrupt him when summer comes, well and good—let him defer it till that time. If on the contrary, should his corn-field, or potatoes, mending roads, or any other service, be likely to interfere,—let him make up his mind at once, to do it now before the sap begins to flow, if possible; and remember that a coat of paint over the stumps of the larger limbs when amputated, is worth more than all the theory that has been invented.

Now a few words in regard to the manner. Cut the under side of large limbs *first*, to prevent them from splitting down; and in cutting of all limbs, whether large or small, be careful to have as little naked wood as possible,—leaving it very smooth, neither jagged, nor split, nor ragged. For this purpose, the saw is the proper instrument on most of the large limbs; though a broad chisel on the end of a pole, and even the axe in dextrous hands may be used in some situations; but then let none but dextrous hands touch it. Most of the trimming in our orchards, is miserably done. †

For the New Genesee Farmer.

Experiments in Feeding Beets.

MESSES. EDITORS—Every writer who intends his articles for publication, particularly in giving experiments which may induce others to make a similar trial, should be very careful in giving the details; also, that he has not been deceived *himself*, lest he deceive others. It frequently happens, that different individuals arrive at different conclusions in making the same experiments, (I mean experiments like the one at the head of this article.) For instance, my friend, D. T. stated to me, some one or two years since, that he considered mangel wurtzel a valuable crop for wintering swine. He said, "he had fed them to his as their principal food. They were very fond of them, and kept in good condition through the winter." The past fall and present winter, I have endeavored to test the value of various kinds of beets as food for store hogs, and am fully convinced that they are the *cheapest*, and, at the same time, as good keep as can be raised for wintering swine. I fed them to my fattening hogs, for their first feed in the fall. I washed and boiled them, mashed them fine in the liquor they were boiled in; then, after standing a few days, fed them to my hogs. They ate them with great avidity, and gained flesh as fast as they afterwards did, fed on new corn in the ear. I did not, however, feed them long enough (some 8 or 10 days) fairly to test their value, as food for fattening porkers.

Samuel Guthrie, in an article headed, "Experiments in feeding Sugar Beets," (Cult. & Far., Vol. I. page 113,) says, "I washed and boiled the beets, and fed them profusely for two weeks. The hogs devoured them most ravenously; but on making a careful examination at the end of this time, to ascertain the progress I had made in fattening them, I learned, to my surprise, that they evidently had gained nothing. One large sow put on an appearance so wo-begone, that I induced a charitable friend to take her off my hands free gratis." The experiment was carried still further, by adding a peck of potatoes to a bushel of beets, and tried two weeks longer, but the improvement was barely perceptible. Then potatoes and beets, in equal quantities, were fed one month more, when they had gained about as much as the potatoes alone would have improved them. "I had now," he says, "17 hogs left, including two beautiful Berkshire, of full blood, &c. As I had provided little else than beets for their sustenance, and as I had de-

termined to give the root a fair trial, I continued to feed them, adding corn and bran, as seemed indispensable, through the winter. This spring I have 14 left, having lost three during the winter; all of which, except the two Berkshires, are miserably poor. These Berkshires, without, to my knowledge, having fared better than the rest, have not apparently suffered at all, but are in fine condition. I attribute this, in *some measure*, to their domineering spirit, and to their greater industry; for they are intolerable monopolists, and in perpetual action." Something then depends on the *breed*; for had they all been Berkshires, we may infer they would all have been "in fine condition" in the spring. Three died during the winter! Did they *starve* to death? Or may we infer that they were diseased, or had not a comfortable shelter to keep off the pelting storms and drifting snow of winter?

"Much depends on the breed, as every farmer knows: much on the health of the animal; something on the season of the year. I failed in attempting to fatten several swine in one case, though they were carefully attended, and various kinds of feed tried; and the failure was totally inexplicable until they were slaughtered, when the intestines were found corroded with worms, resembling those found in the human stomach; and this, I have no doubt, prevented their thrive." The same fact has occurred in another instance, and with the same result. I failed in attempting to fatten some other swine, which had been driven a considerable distance and exposed (probably not half fed on the road) to severe cold and storms."

My store hogs were fed for some weeks on beets alone. Not having a full supply, I have fed them, of late, alternately with beets, potatoes, and corn, all in the raw state. The beets and corn they eat with the same greediness, but the potatoes are a drag. They squeal over them for some time, and then reluctantly eat about half their ration. Another fall I intend to lay in largely for mangel wurtzel and sugar beet, and shall, the coming season, cultivate them accordingly.

I had supposed it to be an established fact, that cattle would fatten if fed sufficiently on beets. But Samuel Guthrie's experience (in the article above referred to) is in the negative. He says, "To one cow, designed for slaughter, I fed some forty bushels in thirty days, and this without making any perceptible improvement in the condition of the animal." I shall have to refer to my friend D. T. again. He tells me he has fattened a beef, this winter, principally on beets. "For the fattening of a bullock, forty or fifty pounds of beets per day, mixed with five or six pounds of dry fodder, will accomplish the object in four months. Care must be taken to give it in three separations, since by feeding often and in small quantities at a time, the same amount of nutriment goes farther." †

Since writing the above, the 1st No. of the 2d. vol. of your valuable paper has come to hand. I was much gratified to find an article [page 11, copied from a "Western paper"] on "Beets for Cattle." The comparative value of beets and potatoes, as food for cattle, I am of the opinion, is rightly estimated. The writer says, "In feeding the same animal with beets, it was easily told that one third less than of turnips or potatoes, would make them give the same quantity of milk of better quality, and *they showed better keep*." The same writer also says, "Young animals [cattle] are peculiarly fond of the raw beets, and *thrive astonishingly on them*." Exactly the same with swine. Farmers, store well your cellars with beets, and make a fair trial. Feed your store hogs and cattle on them one winter, and you will be convinced of their value, and cultivate them accordingly.

J. B. BOWEN.

Aurora, Cayuga Co., January 20, 1840.

* Gen. Far., Vol. 4, page 261. From the transactions of the Essex Agricultural Society on swine. HENRY COLMAN. † Gen. Far., Vol. 8, page 3. Bib. Univ. for 1831.

To the Editors of the New Genesee Farmer:—

GENTLEMEN—On reading an article in the January number of your paper, headed *Effects of the Stock on grafted Fruit Trees*, in which you comment on remarks contained in a late number of the Yankee Farmer, by the editor of that Journal, on the above subject, in which he lays down the following propositions, viz:—

1. Stocks have an effect as to bearing years.
2. Stocks affect the scion in hastening or retarding the ripening of the fruit.
3. Stocks produce defects on grafted fruit.
4. Stocks affect the color of fruit.
5. Stocks affect the quality of fruit.
6. Stocks have an influence in increasing or decreasing the size of fruit."

And, as you observe, the subject is not new to horticulturists—Dr. Menze, of Philadelphia, affirming such influence some years ago, and reviewed by you at the time, in the 3d vol. of the old Genesee Farmer; and not thinking the evidence conclusive, and having seen nothing since to change your opinion, you express your willingness to examine the subject anew with candor and fairness; and you commence in the right way, by stating the results of your own practice and observation.

In addressing you on this subject, I beg to inform you it is one I have been closely connected with upwards of sixteen years in England and this country, the greater part in the former, and the result of my conclusions are the reverse of yours.

In quoting Professor Lindley in support of your opinion, I think the statement quoted does not go far enough in support of the subject under consideration.

Though the food communicated from the albumen of the Quince to the Pear, is in nearly the same state as when it entered the roots of the former, it does not follow that the quantity received would be equal to that communicated through the albumen of a Pear stock, and hence the austerity of the former, and the luxuriance of the latter. Before I quit this part of the subject, it will be well to state, though it is a fact known to most horticulturists, that in all English nurseries, a certain number (sufficient to meet the demands of the establishment) of Pears are worked on the Quince annually, and Apples on the Paradise stocks (a sort of dwarf apple or crab, used as stocks, especially for the premature fruiting of the apple, and the influence it has on the scion to form a dwarf tree or bush) for Espaliers and dwarf. Standards, to plant in the borders of the principal walks in the kitchen garden, where they form a counterpart to the trees trained on the garden walls and add much to the general effect of the garden, and are to be seen in most of the gardens of England; and I never knew an instance of their failing to exercise the desired influence, namely, dwarf habits, premature fruiting, and premature ripening their fruit. Consequently, (though the fruit is mostly fine, if attention is paid to pruning the trees and thinning the fruit when too thick,) the specimens are never so fine as those obtained from trees worked on the thrifty Pear stock, and common Apple or crab stock—which trees are generally reserved for the orchard, with occasionally something choice for an open space in the garden. Instances are not rare in England, (where the climate is not so favorable to the maturing of the finer varieties of the Flemish Pear as the United States, &c. &c.) when trees are not fertile, (I mean Pears,) although in a flourishing state of growth, scions have been taken off and worked on the Quince Stock, and they have assumed fertile habits and bore plentifully. I believe the above includes proposition 2, 5, 6.

By the first proposition is meant (as I understand it) bearing in alternate years, a subject which I think the stock has no influence whatever. On this head I believe we agree, and as you observe, it is a habit chiefly

confined to apples, and always to the late fall and winter apples; summer and early harvest varieties almost invariably being regular bearers, for this reason: they mature their fruit and get rid of their burden in time to recruit strength, make shoots and form buds for the next year's crop; whereas the overburdened winter apple tree holds on to its fruit as long as its foliage, and consequently requires the next year to rest, to recruit its exhausted strength, and form buds, &c., to produce fruit. In my opinion, this is a part of the subject worthy of paying more attention to than is generally paid; and if people who have young orchards, or only a few trees around their door yards, were to take the trouble to thin out the young apples to one or two to a bunch, on observing their young trees assuming these habits, the result would be, the fruit left on would be so much larger and finer, that the quantity would be increased in bulk, though not in number, to as much as if they were all left on, and the buds, divested of the young fruit, would have time to form fruit buds for the next year; and by pursuing this system for a few years, when trees first come into bearing, much may be done to alter the system of bearing in alternate years.

In reference to proposition No. 3, in my opinion, if a stock is decreased, it will communicate it to the scion, and consequently affect the future tree; for instance, I think suckers, or layers, or even seedlings, raised from fruit of diseased trees, will communicate the disease of the parent stock to any scion that may be worked on to it. This I have observed always to be the general rule, though occasionally an exception.

Respecting proposition No. 4, I am not ready to enter into at present. And finally, respecting your currant bushes. We frequently see currant bushes and other trees, partly in a state of decay, whilst the other part flourished luxuriantly; and in the case of the parent stock of your bushes, though apparently in good health when slips or cuttings were taken off, may, if left on, show the disease in some of those identical shoots taken off the following year; but being taken off, it appears in the individual plants, and consequently the superiority of some of your currant bushes over the others.

ONE OF YOUR SUBSCRIBERS.

Orange Co., 1841.

For the New Genessee Farmer.

PEARS.

Who is not fond of good pears? To my taste there is no fruit, not even that of tropical climes, equal to a luscious, melting pear. Few of our farmers know any thing about good pears. Most of this fruit cultivated by them, is of very inferior quality, and yet considered good by those who know of no better. But very little is cultivated. Many are discouraged from undertaking to raise pears, from the idea that it takes a man his life time almost, to obtain fruit by setting out young trees. This idea is very erroneous in reference to grafted trees. Though it takes a pear tree from twelve to fifteen years to bear from the seed, yet the graft, taken from a bearing tree, will bear as soon as any other kind of fruit—in two or three years.

In the spring of 1837 the writer received scions of several choice varieties of pears from Messrs. Kenrick, D. Thomas, J. A. Lazelle, and others, which were then grafted, mostly on small trees set out that spring. In 1839 several of them bore a few, and last year some of them bore plentifully. Among these were the Juliette or Bloodgood, Madeline, Bartlett, Henry Fourth, Passe Colmar, Beurre Die, Lemon pear of Scotland, Bezi de La Motte, Capinmont, (so called, but not the true Capinmont,) Hentchof, Winter Nelis, and Prince's Virguleu. Most of these prove to be excellent. The Juliette, ripening the

latter part of July, is good, but hardly equal to the Madeline, which is larger and ripens about the same time. The Bartlett, which Kenrick thinks is the same as the Williams' Bon chretien, is a most capital pear, ripe in Sept., large, buttery, and of a high mucky flavor, sound at the core. Henry Fourth, one of the new Belgian pears raised by Dr. Van Mons is truly excellent; ripening in October, of moderate size, buttery, resembling very much in flavor the Seckel, though not so sweet, and like this, growing in clusters. It must be eaten as soon as it becomes mellow. It is, in eating, a little before the Virguleu. Passe Colmar is described as one of the very best pears originated by Van Mons. It sustains its character, though to some tastes it would be considered too sweet. It resembles, in flavor, a rich citron or pine apple melon. It is a winter pear, of medium size, growing in clusters, and a great bearer. Beurre Die is another of the new Belgian pears, and a noble one it is; large, buttery, and fine flavored. Though described as a winter pear, it can hardly be called such, as it was in eating in November. Lemon pear of Scotland is a good sized, handsome fruit, ripening in October and November; yellow at maturity; buttery, with an agreeable acid; not high flavored, but a good pear. Bezi de La Motte is an old but good variety; ripe in November, it is of good size; buttery, and of a peculiar flavor. It is worthy of cultivation. Capinmont. The pear I received by this name, is a late fall pear, of moderate size, of a russet color, tapering to the stem, moderately acid, of pretty good flavor; but it answers not all the description of the true kind, which ripens in September, and is said to be a "large and most delicious and beautiful fruit." A scion of the true kind was recently obtained from Mr. J. A. Lazelle of Columbus, Ohio, who says of it, "I have had the true Capinmont fruit this season—first rate. The Capinmont that was in the country previous to the receipt of scions direct from Dr. Van Mons, by Messrs. Kenrick and Manning, is said to have been erroneous." Hentchof. The scions of this were obtained from Mr. Kenrick, who describes it as "a native pear, a capital variety, which deserves to be ranked with the Seckel and Bartlett." There must have been some error about it, as Mr. Kenrick says it ripens "in September;" whereas, the fruit from the scions he sent, did not ripen till January. It could not have been the true kind—probably a mistake. It was however, a good winter fruit, of moderate size, green, juicy, and of a pleasant flavor. Winter Nelis is a small russet-colored fruit, buttery, but of very little flavor; hardly worth cultivating when there are so many others that are better. Prince's Virguleu is another I would reject from my list of good pears. It is a winter pear, of fair size and appearance; green, coarse, and of little flavor. It may be good for baking, but is hardly eatable as a table fruit. I have cut the grafts off to give place to kinds more worthy. Of the above kinds, the Madeline, the Bartlett, the Henry Fourth, the Beurre Die, and Passe Colmar, particularly, I would strongly recommend for cultivation to the lovers of this fruit, in addition to other kinds of known and proved excellence, as the Virguleu, Seckel, &c. I would mention as highly worthy of cultivation also, the Flemish Beauty, Foster, Dix and Dearborn Seedling. Of the first two, Mr. J. A. Lazelle says, "The Flemish Beauty, I had fruit this season. It is large and delicious; ripened in September. It needs to be taken off a little before it is ripe, and ripened in the house. The Foster is a delicious fruit, to my taste superior to the far famed Seckel." The Foster, Dix, and Dearborn's Seedling, are American fruits, of great excellence. Others might be added to this list, but my paper admonishes me I must close this communication.

Urbana, Feb., 1841.

Sowing Locust Seed.

A correspondent in Yates Co. complains that he has found great difficulty in causing locust seed to vegetate, and inquires what preparation is necessary to ensure success.

The difficulty is a very common one, but the remedy is well known to most readers of agricultural papers. If the seed is perfect, all that is necessary is to *soak and soak it thoroughly* before sowing. By this we do not mean *soaking in hot water merely*; but pour on two or three quarts of *boiling water*, and let it soak twenty-four hours, when the whole or a part of the seeds will be swollen to three or four times their former size. If only a part are swollen, they should be separated, and the remainder scalded again. When thus prepared and swollen, they will vegetate almost as freely as corn; but without this process, disappointment will almost invariably be the result.

It is still a good time to gather locust seed from the trees; and if any of our young readers will collect a quantity and take it to the Rochester Seed Store, they will obtain a good price for it.

Raising Fruit Trees from Cuttings.

We have received several communications making inquiry respecting the manner of raising fruit trees from cuttings; and we answer them all in one short sentence. ☐ We do not believe it can be done successfully. This popular error was pretty fully exploded in our vol. 1, p. 210, and therefore we deem it unnecessary to occupy more space with it at present.

New subscribers are reminded that they can obtain vol. 1. at the subscription price.

"A Subscriber" is also referred to vol. 1, for information respecting the worm in fruit trees.

Raising Chestnut Trees for Timber.

MESSES. EDITORS—I have 5 acres of new land—soil cherty, but good, surface rolling, beach timber predominating, which I intend to clear and plant with chestnuts. I propose to prepare the ground for corn, and plant chestnuts in each alternate hill of every second row, with the corn. I would repeat the planting of corn for two or three years, and dress the young trees with the corn till they had attained sufficient size; then sow the land with grass seed, and let the trees grow for fence timber.

Now, if you or your correspondents, will communicate through the medium of "our own paper" some better plan, or throw some light on this subject, I will esteem it a favor, and will promise to inform you of the results of my experiment.

W. DARGITY.

Berlin, Ohio, Feb., 1841.

Remarks.—The plan proposed would probably succeed very well, if the soil is suitable for the chestnut; but of this we have some doubts. This tree delights in a deep sandy or gravelly soil, and is seldom found on clayey soil, or where beech timber predominates. It is worse than useless to attempt to raise forest trees on soil that is uncongenial to their growth; and, if we are not mistaken, Mr. D. had better abandon his project, or select some other kind of tree. The subject is an important one however, and we will endeavor to give more particular information respecting it next month.—Eus.

Ornamental Plants.

It is our intention in this article to depart from our usual course, and speak only of plants which we have not seen, on the authority of others.

In Buist's Flower Garden Directory, printed in 1839, *Clematis carulea* is noticed as an "entirely new climber," introduced from Japan to Europe by Dr. Van Siebold. It is arranged among hardy plants;

and Professor Lindley is quoted for the following opinion:—"It is a charming addition to the climbers cultivated in England. It has a most graceful mode of growth; and the large violet flowers with deep purple stamens, are more ornamental than those of any species of *Clematis* in this country."

Clematis sieboldii is another species from the same country and by the same florist. "Large blue and white, superb—petals suffused with violet spots—anthers of a violet color. An attractive inhabitant of the flower garden, from its graceful habit, and the size and beauty of its blossoms."

In Ruiss's Catalogue for 1810, he mentions *Deutzia scabra* as "one of the finest of white flowering shrubs"—said to be hardy.

Its being hardy at Philadelphia however, is not proof that it would be hardy in the Genesee country. A balance against us of three degrees of latitude, is not all that is to be taken into account. Our elevation above the level of the sea is another item; and our soil in many instances, is a third one of no small importance. Many shrubs, like the Laurels on the mountains to the South, which could abide severer winters than ours, are sickened by the lime diffused through our soil, and gradually perish. Possibly the shrubs above-mentioned may be of this number, and refuse to embellish our gardens, a point however, which experiment alone can determine.

Herbaceous plants which are hardy at Philadelphia, may be easily introduced here, if they have only to contend with a difference of temperature. Our heavy soil is not so deeply penetrated by the frost, and under a more durable covering of snow, and such thick curtains as the condensed exhalations of our lakes, they will generally lie snugly and safely in their winter abode.

We notice the following perennials in Buist's Catalogue, and copy them for the purpose of making further inquiry:—

- Aconitum grandiflorum*—large blue.
- versicolor—blue and white.
- Campanula striata*—striped flowered.
- Delphinium maximum*—superb blue.
- Barlowii—dark purple.
- bicolor—white and purple.
- Dianthus splendissimus*—perennial double crimson.
- Dracocephalum argenteum*—Fischer's fine blue.
- Lobelia propinqua*—large crimson.
- ignea—brightest scarlet.
- Lychnis bungeana*—large star flowered crimson.
- Onosma auricula*—golden flower.
- Paeonia edulis* (albiflora) v. odoratissima—sweet scented.
- Pentstemon cobaea*—large blush.
- coccinea—scarlet.
- Phlox corymbosa* v. alba—white, superb.
- speciosa—very showy.
- alcedina—perpetual blooming crimson.
- lata—very splendid.

For the New Genesee Farmer.

Gold Vine Peas—their History and Character.

MESSRS. EDITORS—Having in your January number given an account of my success in raising the Gold Vine Peas, I have in consequence been addressed by several individuals in relation to their origin, the period of their ripening, and their other peculiar characteristics; and considering your paper the best medium of communicating this information to those desiring it, you will confer a favor on some of your readers, by giving a place in your columns to this communication.

*On a former occasion we referred to a remarkable circumstance: The detritus of this district, including much lime, has been swept over our high hills to the South into Pennsylvania; and wherever this detritus is found, no Kalmia flourishes. We have not observed this deposit however, more than twenty miles South of our boundary.

The Gold Vine Peas were obtained from Canada two years ago by Mr. Bateham, of the Rochester Seed Store. The following is his account of their origin:

"A farmer, in Canada, observing in his field of peas a few vines peculiarly and unusually bright, while the rest were more or less affected by mildew, took the precaution carefully to preserve the peas from these vines, and planted them year after year; fully testing and proving their perfect freedom from mildew, which so frequently destroys whole fields of common peas."

For two years I have tried these peas and find them well deserving the character and high commendation bestowed upon them. A gentleman from Rochester informed me that last season he lost a field of peas of several acres, almost entirely, by mildew; and purchased twelve bushels of my Gold Vine Peas for seeding the coming summer. Several other instances have come to my notice of similar failures. But the Gold Vines, being perfectly free from this blight, secures the farmer from all hazard and loss from that cause.

In ripening, the Gold Vine Peas are from six to fourteen days earlier than the common Marrowfat or winter Peas.

The vines of these peas are at least one-third shorter than those of the Marrowfats; hence a larger quantity of seed may be sown to advantage on the acre—at least half a bushel more.

So far as my experience has enabled me to determine, and I have given them a fair trial, the Gold Vines are greater yielders, by one-quarter, than the common varieties.

Respectfully yours,
Pittsford, Feb., 1841. E. WILBUR.

For the New Genesee Farmer.

Tariff for Revenue—Low Prices of Agricultural Productions more favorable to the nation's wealth than high prices.

MESSRS. EDITORS—The advocates of countervailing duties and protective tariffs in Congress, animated by the true spirit of moderation, have no disposition to meddle with the compromise act, as necessary to such a consummation.

The Secretary of the Treasury in his recommendation of a tariff for revenue of 20 per cent. on silks, wines, and such other articles as are now imported free of duty, while it answers the purpose of revenue, and saves the government from the disgraceful treasury note system, will also give protection to our own productions.

There is little doubt that the next Congress will increase the tariff on such articles, so far at least as it can be done without infringing the compromise act as the expenses of the Federal Government, aside from borrowing, cannot be defrayed without it.

At this time, in the midst of low prices, our agricultural interests have no cause of alarm. These low prices have alone induced an unprecedented export trade the past year; a great diminution of both foreign and domestic indebtedness; a balance of trade in favor of the country to the amount of \$27,000,000; less speculation and extravagance, and greater industry and economy among the agricultural no less than among all other classes.

From the report of the Secretary of the Treasury, Mr. Woodbury, we learn that all our exports the past year amounted to \$131,591,950, exceeding by more than ten and a half millions of dollars the exports of 1839, notwithstanding the extreme reduced prices of some of our great staples, while the imports of the past year were more than one half less than in 1839. For several years back our imports have exceeded our exports nearly twenty millions of dollars. In 1836 the excess of imports over exports amounted to \$61,346,694; but now, in 1840, in spite of the unusual low prices for all our great staples, cotton, flour, &c.,

our exports exceed our imports nearly twenty-seven millions of dollars. A balance of trade in our favor more than three fold greater than ever accrued before in a single year since the Constitution was adopted.

It is an axiom among business men that when agricultural productions are high, not only the farmer, but the whole body politic, increases its indebtedness, and *vice versa*. The high price of our staples in New York brings exchange in our favor, our banks discount liberally to speculators and millers, money again circulates, prices are inflated, and speculation, folly, and extravagance are on foot. When prices fall, the banks curtail their issues, and money is not. The farmer finds, to his utter astonishment, that his last year's debt, which might then have been paid by half a crop, cannot now be liquidated by two crops. A healthy retrenchment and reform now commences, and better habits of industry and economy are acquired.

Let farmers then, instead of creaking about the low prices of their productions, reflect that those low prices alone have enabled Western New York, Ohio, and Michigan, to reduce our foreign indebtedness the past year, by an export of flour to England and France, to the amount of several millions of dollars, and that this same export continues to England even against a duty in the English port of three dollars a barrel. Let him also reflect that as low as are the staples of the north and west, they are no lower than the great southern staple, cotton; the article without which our country could never have arrived at its present state of luxurious civilization.

When, in 1837, flour was wanted for export to England at \$5 per barrel, instead of selling at that price, and thus reducing our foreign debt, the New York commission houses held on for \$10 a barrel. The result was, that instead of exporting flour, we imported several million bushels of wheat and rye from the north of Europe. This both increased our indebtedness and reduced the price of flour from \$10 to \$6 per barrel. During this monopoly and consequent inflation of the prices of bread stuff in New York, farmers bought more land, built fine houses, and rode in steel spring carriages—the whole country went into debt with rail-road speed; and, as if we could not increase our indebtedness abroad fast enough, our government took off the duty on rail-road iron. High prices of produce, and the consequent high prices of labor, paralyzed our manufacturing industry and prevented the exportation of manufactured articles. Every thing was imported, until, as might be expected, a general revulsion and prostration ensued. But in 1839 and '40 the low prices of the necessities of life, caused by increased production and better notions of economy, has enabled the country to export the past year, aside from agricultural productions, three times the amount of manufactured articles ever before exported in a single year.

S. W.

Produce of One Acre of Ground.

Mr. J. Fry, of Concord, Erie Co., N. Y., raised 100 bushels of sound (shelled) corn, twenty-five bushels of potatoes, and two cart loads of pumpkins on one acre of ground, the past season, and sold his corn stalks for 15 bushels of oats.

The above is the poster to a business letter received by us a few days since from Erie county. We wish our friends would more frequently annex such items of information to their letters of business.—Eds.

Domestic Industry in the Far West.

A correspondent in Iowa informs us that the women of his household went to manufacture domestic cloth, such as linsey woolsey, flannel cloth, blankets, &c.; but find much difficulty in the *warping*. We hope this art is not yet to be lost; and therefore request that some of our readers will give our western friends plain and full instructions on this subject.

For the New Genesee Farmer.

Rust on Wheat.

MESSRS. EDITORS—If there is one subject more than another in which the farmer is deeply interested, and which needs thoroughly investigating, it is the one at the head of this article. It is not an evil consequent upon poor farming, for it attacks, indiscriminately, the grain of the best, as well as the poorer class of farmers. The ground is thoroughly prepared, the seed committed to the bosom of the earth; its progress is watched with anxiety, and it promises a plentiful harvest. The farmer's expectations are about to be realized, when he discovers the ravages of a disease, which is either to deprive him of a part of his earnings, or entirely to destroy the "golden prospect" and rob him of the whole.

The writer of this article is well aware that he has entered upon a difficult subject. Difficult, because there are difficulties constantly arising, or, in other words, discordant suggestions are continually presenting themselves to one's mind while investigating it. He does not flatter himself with the expectation of arriving at the right conclusion. His only aim is to add his little, and to solicit others more competent than himself, to come forward and investigate the subject. We want all the facts connected with the subject, that any one, and every one, may be in the possession of, for in this way we may arrive at the truth.

Well, what is to be done? In the first place, let us ascertain, if possible, what this evil, rust, is; and in the second place, the cause of its attacking and the manner of its affecting, the plant.

It is believed by most who have written upon the subject, that rust is a parasitical plant of the fungus kind. Some, however, contend that it is "nothing more than the thickening juices of the plant, excreting through the ruptured envelope, and dried and blackened in the sun." That the rust is a plant of the fungus kind, is a fact established perhaps beyond a doubt. There are two distinct kinds, commonly called the *yellow* and *black* rust, both of which attack wheat, though the latter is much more injurious. They are described by Professor Eaton, in his North American Botany, as follows:—"Uredo linearis, (yellow grain rust,) linear, very long, stained yellow, at length but obscurely colored. On the culms and leaves of barley, oats, rye, wheat, &c." and "Puccinia graminis, tufts dense, oblong, often confluent, forming long parallel lines in the direction of gray fibres; color, yellowish brown, becoming black; seeds elongated with the upper shell shortest, containing dust; stripes filiform. On wheat and other grasses. Called rust or blight."

The cause of either of these fungi affecting grain in the manner it does, or rather the preparatory cause for its reception and germination on the stem and leaf of the plant, is what is yet to be learned. The following passage is found in an article on the rust or mildew of wheat, in the Edinburgh Quarterly Journal of Agriculture:—

"The dust-like substances of the rust originates beneath the outer bark or epidermis of the plant, which it raises and renders thin, and at length cracks and bursts through. When examined by the microscope, it presents a congeries of egg-oblong bodies, some of which have projections almost like tad poles, or powdery, though they are not animated."

The question then arises, supposing the dust-like substance of the rust to originate beneath the epidermis, where do the sporules or seeds of the fungi lodge, or become deposited, and what is the state of the leaf and stem most favorable for this reception? Some suppose the sporules fall upon the ground, and are absorbed by the roots of the plants and carried by the sap through the pores of the stem, where they germinate and produce the disease, called rust. Others contend that the sporules are blown by the winds

and lodge upon the leaf and outer bark of the plant. The time most favorable for their propagation, is damp warm weather. The epidermis of the plant is then damp, consequently the seeds of the fungi are easily attached to it. Again it is contended, that wheat, the most likely to be affected, is that which has been kept back in the spring, from some cause, either by being raised out by the frost, or late sowing, when, particularly if the soil is rich, it grows too rapidly, and the consequence is, the juices or sap of the plant accumulates sufficiently to check or split the stem. The exudation of the juices through these openings makes suitable lodgements for the sporules, and the damp sultry weather, hastens the germination and perfection of the fungus. Its growth is very rapid, arriving to maturity in the short space of twenty-four hours; and producing probably many millions of seeds. Hence the cause of its spreading with such rapidity.

J. B. BOWEN.

(To be continued.)

For the New Genesee Farmer.

Lime and its Application.

MESSRS. EDITORS—Having read some paragraphs in both the old and New Genesee Farmer on the subject of applying lime to the soil, but having seen none which agrees with the manner in which I was, in early life, used to seeing it applied,—I will give you a brief statement, should any of your numerous readers think it worth a trial.

For wheat, we used to consider it best to have it drawn and prepared some two or three months before its application. The manner of preparing, thus:—Plough round your inclosure intended for wheat, say six or eight furrows, (it will be better drawn out in the field than left for brush and briars to grow in.) Along the centre of these furrows put your lime, and cover it with earth six or eight inches thick. If the weather is moist, two or three days will dissolve it to powder, when it should be thoroughly mixed with the soil, that is around it, by means of a hoe, and drawn up in a conical shape, when, if it is thoroughly dissolved, (which it should be before mixing,) it will receive no injury from the weather. It is not likely that there would be enough to go over the whole. Then the centre of the field might be ploughed, say two furrows each way, and heaps thrown up at suitable distances for spreading, prepared in the same way. The writer has seen swamp muck, road soil, &c., prepared in this way, and attended with very beneficial results.

For spring crops, the lime was drawn in the early part of the spring, and the heaps made at suitable distances for spreading, by throwing two or more furrows against each other and the lime allowed to dissolve in the same manner; but in no case spreading it before it was well mixed with the soil with which it was covered. This was the manner of applying lime to the soil in the west of England twenty years since.

Yours respectfully,

A SUBSCRIBER.

Erie County, Jan'y. 1841:

For the New Genesee Farmer.

Sprouting Garden Seeds—Raising Onions.

MESSRS. EDITORS—The approaching season will soon resume the interest in the field and garden; and it may not be unprofitable at this time to consider what will be the best course to pursue. The following statements are advanced as proof of the very great advantage derived from the simple process of sprouting garden seeds before planting. The positive knowledge of its benefits, is derived from six years' practice. There is no difficulty to be apprehended if the same judgment be exercised that is required in the common operations of the garden.

First, soak the seeds in water from six to twenty-four hours—some seeds being slower to admit mois-

ture than others, is the difference in the time required. After soaking, drain off the water, and mix the seeds with a sufficient quantity of earth to absorb the moisture remaining on the seeds; stir them often that they may vegetate freely, and keep them in a moderate degree of warmth and moisture until they are sprouted, when they are ready to be put into the ground. If the weather should be unfavorable, put the seeds in a cool place, which will check their growth.

The advantages of this practice cannot be better shown, than by relating the management and improvement of the onion crop in our own garden. The culture of the crop in 1840 was as follows:—Just before the approach of the preceding winter, there was a light dropping of fine manure put on a piece of land designed for onions, containing $2\frac{1}{2}$ acres, and the same ploughed. It remained until a thaw in the winter; it was then ploughed again—the frost was not all out of the ground—it was consequently left very rough; more of the soil was exposed to the frost, which was beneficial. It was left in that situation until the time of sowing. In April, as soon as the soil was sufficiently dry, the ploughing was commenced, and the second day, at night, the sowing was finished, with seed prepared as before stated. In one week the onions were up, rows were soon visible nearly twenty rods and no weeds yet appeared. The operation of stirring the soil with rakes and hoes was then commenced, and the weeds were not suffered to grow during the summer. (It is a mistaken notion that it is not time to hoe a garden until it is green with weeds.) The first of September the onions were harvested, and the product was over two thousand bushels of fine onions from two and a half acres.

The management of the crop six years before, (in 1834,) was as follows:—Early in the spring there was a light dressing of fine manure put on the piece of land intended for onions, containing $2\frac{1}{2}$ acres (the same piece before mentioned.) The necessary travel across the ground for the purpose of manuring, and the natural state of the soil, as it had remained from the time the crop was taken off the preceding fall, produced a great quantity of lumps after ploughing, and although the work with teams, bushing and harrowing, was four times as great as in 1840, it was not in good condition; the seed was sown dry; a season of dry weather followed, consequently the onions did not come up until the weeds were started, which made it a great task to till the crop. By referring to the memorandum kept for that year, (as the practice has invariably been to register daily proceedings or occurrences connected with the garden,) the onions were sown the 15th of April, and the weeding commenced the 21st of May, which was as soon as the onions were fairly up, making 26 days more for the weeds to grow than in 1840. The onions did not all bottom, on account of the late start in the spring, which is generally the cause for what it is termed *skullions*, (a difficulty which more or less prevails; but by the improved practice it is not in the least to be feared.) The produce was eleven hundred and forty bushels from $2\frac{1}{2}$ acres, and the quantity of labor very nearly double the amount required in 1840.

The practice of 1834, had been followed successively on the same piece of land for twenty-five years. The former proprietor had been engaged the most of his life in raising onions, and it was supposed had gained the point of perfection in that business, especially as, previous to his settlement in this country, he came from that well known town in the land of Yankee nativity, where originated the large stories about raising onions, that amused and astonished the children in other parts of the country fifty years ago.

W. RISLEY,

Horticultural Garden, Fredonia, N. Y. 1841.

For the New Genesee Farmer.

Bots and Horse Bees.

MESSEES. EDITORS—I wrote a few observations upon the horse Bee and Bot for the Genesee Farmer, which was published in vol 5, page 85. Some suggestions I there made, which I thought true at the time; but some further light upon the subject, has somewhat changed my views—which to acknowledge, is only to admit that we are wiser to day than we were yesterday.

Anything that directly or indirectly concerns the worth or welfare of that noble animal, the Horse, should not be disregarded. The bot or horse bee, of themselves, we care not a pin about; but as far as they concern the horse, we have the best of reasons to be deeply concerned.

About the 4th of August I found several bots in one of my stables, where I kept two of my horses. I selected three of them and put them into the box of my carriage for safe keeping, until I should go to my house. I had supposed a bot unable to crawl, having never seen them do it, and never seeing any legs or apparatus for progression: I therefore concluded they were unable to advance or retreat of their own volition; but I soon saw they had the power of crawling with tolerable speed in a manner that I had not suspected. The body of the bot seems encased in several circles, and incapable of but a little motion more than a slight elongation and contraction; but their heads and necks are very ductile, and capable of much motion, being about five-eighths of an inch long when contracted, and seven-eighths of an inch when elongated. Their motion, like the maggot tribe in general, seemed to be by a distending of the head and neck, then seizing hold with the mouth, and instantly contracting the neck so as to draw the body forward. Any little unevenness would jostle and upset them. They crawled about my carriage box for some hours, searching every depression, or knot, or nail hole, eagerly, as if intent to escape from the air, or light, or both. I observed, when they were searching a crack, knot, or nail hole, they would root up and throw out dirt like little pigs. When I went to my house I took them along, and put them into a wide mouthed vial, tied a cloth over the mouth, and laid them by in a drawer to see what would be their end. After occasionally crawling about a little for ten or twelve hours, they contracted, changed from an opaque or horn color, to a reddish chestnut color, and then lay dry and immovable until the 8th of September, being 35 days. When they came forth, three Horse Bees, two females, (full of eggs or nits,) the other having none: I think it was a male. Whether the eggs are fecundated, or impregnated, I have made no experiment yet to ascertain. Their close confinement might have made them unhealthy, and deprived them of the inclination to fecundity. They seemed incased in nine circles, and armed with short, stiff hair, between the segments of the circles.

In consequence of all three of the bots passing into their chrysalis state in one day, and all coming forth horse bees (*Æstrus equus*) in another day, I am led to infer that the times of their changes are quite regular, especially the time they remain in the chrysalis state; also the time they remain a horse bee or bot fly; but the time they generally remain a bot maggot, or larva, in the stomach of the horse, I am now unable to say; but we may safely conclude if they are cast out any season but a warm season, they must perish. As the temperature of the stomach of the horse is about the same, summer or winter, I think it most probable they come to maturity at some certain time from the period they reach the stomach of the horse, probably ten or eleven months.

Whether a bot is armed with teeth or other apparatus sufficient to perforate the coats of the stomach of a horse, I cannot now decide; but that they possess ample means to trouble and greatly annoy the horse, I have no doubt. It is a well known fact that all the insect tribe while they are in the maggot or larva state, are very active and voracious.

Whenever the bot is in any way disturbed, it contracts itself into its coat of mail, *capapie*, which renders it invulnerable to the most of substances that a horse can endure, which probably is the reason of the difficulty generally of ridding the horse of them. I have much faith in the use of spirits of turpentine, in doses of from a gill to half a pint, in molasses or sugar, every one or two hours, until it gives relief, whether it be bots or colic, as we cannot often know which is the trouble, knowing that all the insect and vermin tribe are so much annoyed or destroyed by the contact with spirits of turpentine; beside, the horse or human subject may safely use large doses of it, if they use sugar freely with and after it, to abate its acrimony. Another remedy I think is entitled to a trial at least, viz: one quart of new milk, saturated with honey, molasses, or sugar, in the order named, (fasting if possible,) two hours after drench with a pint of brine, as strong as boiling water can make it; two hours after give half a pint of flax seed oil.

It is asserted that the bot will fill itself so full of the first mixture, that the action of the other destroys it.

Baron Cuvier says, the different classes of the fly (*œstri*) in their larva state, inhabit the ox, horse, ass, rein deer, stag, antelope, camel, sheep, and hare.

SPECTATOR.

Brighton, N. Y. Jan'y. 1841.

Use of Swamp Muck.

MESSEES. EDITORS—A Young Farmer asks if marshy black earth can be made a good dressing for upland. I think it can. First, cart it from the bed on the land you wish to manure, or any other place convenient, in heaps, or, which is better, in rows, like winrows of hay, and about the same size, and after it has lain a month or two, or six, all the better, take stone lime, lay it along on the top of the row, say one bushel of lime to 15 or 20 of black earth; put on water sufficiently to slack it, and cover it with the earth slightly; as soon as it is perfectly slacked, and while hot, begin at one end of the pile and mix well together, and apply it to the land when wanted, and it will be found an excellent manure. Another good way is, when you have cleaned out the barn yard in the spring, cart in the black earth to the depth of 10 or 12 inches; throw on occasionally straw, leaves, green weeds, &c.; let the cattle run on it through the season; it will get saturated with urine, (the strongest of manure,) and in the spring following when carted out, will be fine manure. Shell, or calcareous marl, is also an excellent mixture, (and possibly a Young Farmer may find some by digging two or three feet deep in his black, swampy earth.) Farmers often cart swampy earth on the land and immediately plough it in, but I think with little profit. It is too sour—it wants to be laid up to the air, and mixed with lime, marl, or something to sweeten it.

As to the best and cheapest kind of fence across the marsh, I cannot say from experience; but think that a live fence of willow, swamp elm, or American thorn, would be the best. Throw up the bank, a foot or two high, or sufficient to be tolerably dry, and plant cuttings of the basket willow, 10 or 12 inches apart; and in two or three years it can be cut yearly for making baskets, &c.; but probably the native thorn would make the best and most durable fence, and it would require more labor and expense. The ground must be thrown up dry, and well prepared with lime,

manure, &c.; the plants put in 6 or 8 inches apart; kept clean and clipped, and in a few years it will make a beautiful and durable fence.

A FRIEND TO IMPROVEMENTS.

Norburgh, N. Y., Feby, 1841.

For the New Genesee Farmer.

RECEIPTS.

TO KILL LICE ON CATTLE.

Feed them a quantity of sulphur in small doses at a time, mixed with cut roots, hay, salt, or any thing else. [This we believe very efficacious, the sulphur passing to the surface and repelling the lice.—Eos.]

TO MAKE CALVES EAT ROOTS.

Found the roots fine, mix with them cut hay, bran, or any thing they will eat, and in two or three days they become fond of the roots.

The following were handed me by a lady of no small standing, so you may depend upon their accuracy.

TO MAKE WISCONSIN MINCE PIES.

Take the usual quantity of meat, and substitute *beets* for apples, but in only one-third the quantity of the latter,—boil the beets, pickle them in vinegar 12 hours, chop them very fine, and add the vinegar they were pickled in. Add one-eighth of grated bread, and spice to suit you.

TO MAKE INDIAN LOAF BREAD.

Stir Indian meal in skim milk to the consistency of pan-cake batter, about two quarts. Add 2 teaspoonfuls of molasses, 1 of saleratus, 2 of shortening, and 2 tencups of wheat flour. Stir in the evening, bake in the morning, and eat while hot.

TO MAKE WISCONSIN SPONGE CAKE.

Take 2 eggs, (or omit them if wished,) 1 tencup of buttermilk, 1 tea-spoon of saleratus 2 table-spoons of cream, and salt to suit. Stir to the consistency of pan-cake batter. Bake 20 minutes on tin pans, and eat while hot with butter. F. H. SPERLEY.

Wisconsin.

Summer all the Year.

MESSEES. EDITORS—The "Hot Air Furnace," which was designed by W. R. Smith, of Macedon, and described by you in the October number of your valuable paper, has been tested by me for the last four months, and I am now prepared to give my testimony concerning it. It will take about twelve cords of wood to warm three or four rooms in my house, day and night, for one year, or about two cords for one month, during winter. This is about the same quantity that I have been accustomed to use in one fire-place, to burn me on one side and freeze me on the other, through the day only, while it avoca much expense in preparing fuel for the fire, the furnace receiving wood forty inches in length and sixteen inches in diameter. We use no more bedding in winter than in summer. We keep milk and other things in the buttery at such a temperature as we please. In short we can keep any room in the house at any desired temperature, and all this from one fire in the cellar, while the rooms are free from smoke, soot, and ashes. I find in the furnace, all the benefits described by you, and can cheerfully recommend it to the public. I would advise all who design building new houses, whether private dwellings, meeting houses, or public schools, to examine the subject. Mr. Williams, of Palmyra, who furnishes the castings, designs to make some improvements in his patterns, by which the price will be somewhat reduced. Summer is the time to build, and the winter to enjoy it.

Yours truly,

V. YEOMANS.

Wheaton, Wayne Co., N. Y., Feby, 1841.

Making Hot Beds—sowing for March.

This is called the first month of Spring, but in this climate the weather savors too much of winter to allow of much being done in the Garden, except making preparations for next month, or forwarding such articles as are desired early, by means of hot-beds. Almost every farmer or mechanic, who cultivates a garden, would find a small hot-bed of sufficient advantage to amply compensate for the care and labor it requires. There are few greater luxuries than the early Radishes, Lettuce, Cucumbers, &c. which a good hot-bed affords, to say nothing of the advantage of starting Cabbages, Cauliflower, Broccoli, Celery, Tomato, Pepper and other plants a month or two earlier by this means than could otherwise be done.

Hot beds can be made any time during this or next month. We gave particular directions last year (Vol. 1, Nos. 2 and 3,) for preparing manure, constructing the frames, sashes, &c., and therefore deem it unnecessary to do so again in detail, but as it is particularly desired we will repeat the directions for constructing hot-beds.

"Select a site for the bed, on dry ground, where it will be fully exposed to the sun, but sheltered from the north and west winds. Mark out the size of the bed, allowing six or eight inches on all sides larger than the size of the frame. Then drive down a good strong stake at each corner, as high as you intend to build the bed. Then take the manure (which should be fresh stable manure in a good state of fermentation) and commence building the bed by mixing the manure thoroughly, and putting on successive layers, beating it down with the fork. Observe to place it smoothly and firmly around the outside, so that it will not settle unevenly from the weight of the frame. The height of manure requisite, will depend on the time at which the bed is formed, and the purpose for which it is intended. If made early in March, and intended for growing cucumbers, &c., a good deal of heat will be required for two or three months, and at least four feet high of manure will be necessary. But a bed made early in April, for the purpose of forwarding early plants to be transplanted into the garden, will not require more than half that quantity.

"When the bed is made, put on the frame, and then put in about six inches of good fine earth; put on the sash and let it remain two or three days for the heat to rise, when it will be ready for sowing.

"Make the earth smooth and fine before sowing; if cucumbers or melons are to be planted, raise slight hills for them under the middle of each sash. The articles usually sown in hot beds are cucumber, radish, lettuce and cress, for early use; and cauliflower, broccoli, cabbage, egg plant, tomato, pepper, celery, &c., to transplant. The earliest varieties of each are of course the best for this purpose."

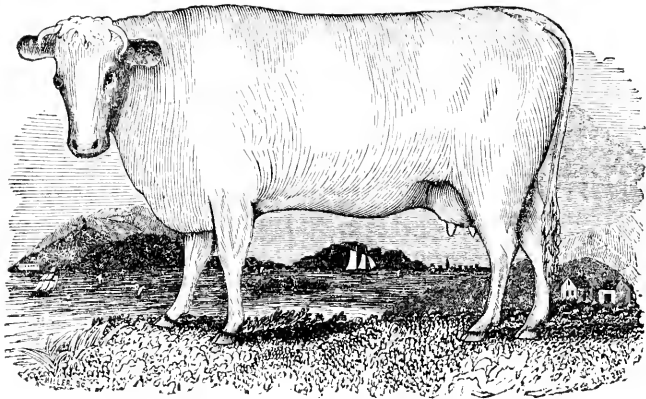
Mangel Wurtzel.

Our respected neighbor, Dr. D. A. Robinson, raised the past season, from one half an acre of land, a little less than five hundred bushels of mangel wurtzel.—This was done at a cost, estimating labor at a dollar a day, of about two and a half cents per bushel. Land, previously in good condition, was manured broadcast at the rate of about forty loads to the acre, ridges were subsequently formed, the seed planted in drills upon these half an inch deep and rolled, and the crop afterwards thinned and kept clean.

It may be proper to state, that the seed, obtained at the Rochester Seed Store, was sown at the rate of two pounds only to the acre, and afforded an abundance of plants, which required thinning to less than one third. We believe nearly all the failures of seed the past year were from planting too deep.

Correction.

We thank the Farmer's Gazette for correcting an error we committed, in stating that the report of the farms of J. B. Davis and W. K. Townsend were made to the Hartford County Agricultural Society. A Connecticut readers very well know, Derby and East Haven are in New Haven county, and by a *lap sis penne*, and not from ignorance, we gave Hartford, and not New Haven the credit.

**JESSAMINE.**

THE PROPERTY OF WM. R. SMITH, MACEDON.

Jessamine is from T. Weddle's imported stock. Dam, Lady Bower; bred by the celebrated Major Bower, of Welham, Yorkshire; which, with her calf, 10 months old, was sold by T. Weddle to J. C. Hathaway for \$1,000;—is by Rover, (alias Charles,) bred by the Earl of Carlisle, and whose pedigree has been given in this paper, (page 8.) A calf, 10 months old, by the same bull and cow, sold to Kentucky for \$600.

The color of Jessamine is pure white. Great care has been taken to have the portrait correct, exhibiting the deformities as well as beauties; for unless portraits of animals are rigidly correct, they are worse than useless, tending only to mislead.

Scraps.

CONDENSED FROM EXCHANGE PAPERS, &c.

MANL.—In some parts of New Jersey, according to Henry Colman, the recent use of manure on land has been of great efficiency. "It has more than doubled the value of the lands in the neighborhood of the pits where it is found. The application of one hundred bushels to land, which, under common cultivation, would not produce more than 20 bushels of corn to the acre, causes it to yield 60 bushels, and wheat and clover in proportional abundance."

PEAT.—The island of Nantucket contains 985 acres of peat swamp, from one to fourteen feet in depth; and in the state of Massachusetts there are at least 80,000 acres, of an average depth of at least six feet.

GOOD FARMING.—A farmer near Philadelphia, on a farm of 130 acres, has an average yearly crop of 1,500 bushels of wheat, 450 bushels of rye, and 500 bushels of corn annually. He pursues a regular system of rotation.

GRASSES—loss of weight in drying.—The following experiments were made in 1822 and '23:

	1822.	1823.
100 lbs. of green White clover gave	17½	27
" " " Red clover	27½	25
" " " Herd's grass	" 40	39
" " " Fresh meadow	" 38	41
" " " Salt grass	" 39	40
" " " Corn stalks	" 25	25
" " " Red top	" 46	46
" " " Couch grass	" 48	48
" " " Fowl meadow (Poa nemoralis?)	" 53	53

The white clover of 1822 grew in shade, that of '23 in the sun. The salt grass of '22 a second growth.—J. Wells, in *Agrie. Jour. Mass.*

CATTLE—new breed.—Col. Jacques, of Charleston, Mass., has for several years been breeding from an imported short horn bull, and a native cow, his stock at present amounting to about sixty. The first heifer from this cross gave, the first year of milking, sixteen quarts a day. The milk from his cows is very thick, the cream very thick, and yields very little buttermilk. He says, 100 lbs. of cream will make 95 lbs. of butter. One of his cows makes one pound of

butter for every four quarts of milk. He does not feed much—says food will never make a fine breed, but that blood is every thing. His cows in milk have hay or grass, with one to two pecks of roots a day.

COTTON CROP.—The Governor of Alabama, says, "the cotton crop has fallen so far short of reasonable calculation, that without a forbearance on the part of creditors, not to be expected, the pecuniary distress of the people, the next year, will be unprecedented and ruinous."

BALKY HORSES. it is asserted, can be easily made to do their duty, by tying a cord round the ear close to the head, which will operate like a charm, where whipping, coaxing, and every thing else, have proved fruitless.

KEEPING STORE HOGS.—E. C. Frost, in the Cultivator, states, that he kept 24 shoats last winter, at an expense of 20 cents a day, (less than a cent per head,) by feeding them 10 lbs. of hay, half a bushel of potatoes, and 4 quarts of corn meal, daily, and never had hogs winter better. The hay, cut fine, was boiled with plenty of water, the potatoes were boiled in another kettle, pounded fine, mixed with the hay and meal, and let stand a day till fermented.

MANUFACTURES IN MASSACHUSETTS.—These exceed the largest crop of cotton ever raised in all the cotton growing states,—that of last year, which at 8 cents a pound, amounted to \$67,000,000, which is less than the returns in Massachusetts for 1837. The manufactures and fisheries of that state were \$92,000,000.

FUEL.—It is estimated that upwards of \$50,000,000 are consumed every year in the United States for fuel.

DEPTH OF LAKES.—A correspondent of the Geneva Courier, gives the result of an experiment made by Judge Norton and others, to ascertain the depth of Seneca lake, near Big Steam Point, which at one third of the distance across from the west shore was 461 feet, and at one half the distance, 553 feet. The depth of Cayuga lake at Aurora, according to the measurement of Dr. John Gridley, formerly of that village, in 1826, was found to be as follows:—1st sounding 51 feet; 2d, 72; 3d, 108; 4th, 120; 5th, 176; 6th, 192; 7th, 258; 8th, 282; 9th, 46. The

sounding was three quarters the distance across to the east shore, and the others at equal distances. The lake is doubtless much deeper some miles south, and never freezes there, while it does sometimes at zero.

SALT FOR CATTLE.—The celebrated Curwen, says, before I commenced giving my cattle salt, my fattest bill averaged 58 pounds per annum, (more than 2), and since I have used salt, I have never paid by one year over five shillings." Did this difference result from the salt alone, or was not the care in giving salt regularly accompanied with a corresponding care in other particulars, also tending to prevent loss? Try the experiment, farmers.

PRODUCE IN CATTLE.—A house in Boston, has annually slaughtered 5 or 6000 head of cattle, found, in the last twelve years, an increase in the average weight, from about 800 to 900 lbs. In the open market, cattle slaughtered have increased at one third in the last 50 years, and mutton not

SPANISH WALL FRUIT.—An English gentleman fenced with paint a part of the garden wall on which his grapes were trained, which caused an increase of three fold in the weight of the fruit on the fenced part, the bunches being much finer, larger, and earlier ripened. The absorbing and radiating of black surfaces is well known.

RUSSIAN FLY.—Margaretta H. Morris, of Germantown, Pa. has made some recent observations on this pest, which if correct render former opinions relative to its habits erroneous; and her positions, if established, will be of great importance. According to her observations, the parent insect lays its egg in the seed of wheat; the egg remains unaltered till the wheat is sown; the young worm remains below the surface of the earth during winter; in the spring it ascends to the stalk, passes to the sheath, changes to the pupa or "flax-seed" state, and finally, when the wheat is ripe, to the perfect insect or fly, which lives seven days, during which time it deposits its eggs. It prevents its ravages, therefore, seed wheat must be sown from regions where the insect is unknown, the farmer who sows seed from a district ravaged by it actually commits the absurdity of planting the seed for the next year's crop. We believe her report not entirely original, and it needs more observation to establish its correctness.

Horticultural Meeting.

A meeting of the friends of Horticulture, in Montreal and the adjoining counties, will be held in the Arcade House in Rochester, on Monday the 15th of the next, at 11 o'clock, A. M.; for the purpose of organizing a society, and devising such other means as may be deemed expedient to give a general impulse to horticultural pursuits.

The objects of the meeting are of general importance; it is to be hoped that this call will meet with a response from every friend of the cause throughout the country. It is the duty of every one to attend to his own interests or takes an interest in the productions of the garden, or who wishes to improve or beautify the rural aspect of our country.

Our countries, and other portions of our own continent, have derived great advantages from Horticultural Societies, and their influence begins to be generally appreciated: for we find that on all sides of us, from the north, east and west, such associations are being organized. Why not here? It is evident to all eyes, that in no portion of the Union are horticultural pursuits generally more neglected, or in a more backward state than in Western New York, and in the advanced state of society, the universal advantages of soil, climate, &c., and the

enterprising character of the people. It is certainly high time that a combined and determined effort was made to promote the interests of this important branch of rural economy. Agriculture has received a powerful impetus all over the country through the influence of Societies. They have disseminated a spirit of improvement throughout the farming community.

The same successful results will no doubt attend the efforts we are about to make to improve our system of gardening, if a proper spirit is evincing now; as we hope there will be, and Western New York in a few years will be able to vie with any portion of the Union, in respect to her horticultural productions.

H. B. WILLIAMS,	H. N. LANGWORTHY,
W. VAN ZANDT,	J. WILLIAMS,
E. M. PARSONS,	C. L. CLARKE,
A. ERICKSON,	M. B. CROSBY,
J. HAWES,	C. F. BATHAM,
J. H. THOMPSON,	H. O'REILLY,
T. H. HYATT,	LEWIS SELVE,
E. F. SMITH,	R. GORSLINE,
J. B. ELWOOD,	S. HAMILTON,
P. G. TOREY,	WM. PITKIN,
J. CHILD,	J. M. WHITNEY,
WM. M'KNIGHT,	G. H. CHAPIN,
J. R. REILLY,	S. O. SMITH,
JOSEPH FIELD,	SHAS CORNELL,
EUGENE WATTS,	JAMES H. WATTS,
ASA ROWE,	G. ELLWANGER,
A. REYNOLDS,	P. BARRY,

Monroe County Agricultural Society.

The annual meeting of the "Genesee Agricultural Society," was held pursuant to notice at the Arcade House, Rochester, on Tuesday the 2d February. After considerable discussion, it was resolved to change the name and constitution of the Society—that it be called the "Monroe County Agricultural Society," for the advancement of agriculture, horticulture, and the domestic arts in Monroe county.

It was then Resolved, That a meeting of the Society be held on the 5th day of May next, to appoint committees and make arrangements for the coming season.

The following persons were elected officers of the Society for the ensuing year:—

President—LYMAN B. LANGWORTHY, Esq. Greece.
 1st Vice President—William Garbutt, Wheatland.
 2d " " Henry E. Rochester, Gates.
 3d " " Wm. C. Cornell, Henrietta.
 Recording Secretary—H. M. Ward, Rochester.
 Corresponding do. M. B. Bateman, do.
 Treasurer—Charles F. Crossman, do.

MANAGERS.

Rawson Harmon, Jr., Wheatland,
 Oliver Culver, Brighton,
 Thomas Weddle, Greece,
 Isaac Moore, Brighton,
 H. E. Barnard, Mendon,
 Wm. Pixley, Chili,
 Enoch Strong, Perinton,
 John B. Smith, Ogden,
 John H. Robinson, Henrietta,
 George C. Latta, Greece,
 J. P. Stull, Rush,
 Geo. Sheffer, Wheatland,
 Dr. Abel Baldwin, Clarkson.

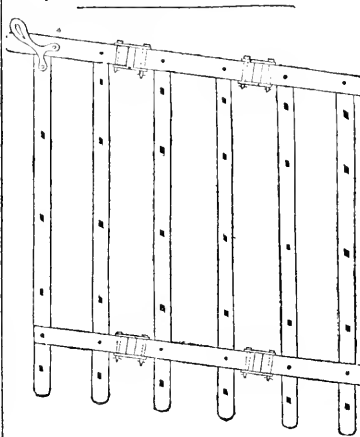
H. M. WARD, Sec'y.

Canada.

The two Canadas are now united in one Province, and Kingston is selected as the location for the seat of government. Lord Sydenham is Governor in Chief of the whole Province, and Sir George Arthur Lieutenant Governor of the upper portion. This adjustment of the political affairs of the country appears to give general satisfaction, and it may confidently be expected that Canada will now make more rapid advancement in agricultural improvement. We are gratified to perceive increasing spirit in some of the

Agricultural Societies—and especially to find an increasing demand for the New Genesee Farmer.—Several of the Societies have ordered large numbers for the use of the members; and their letters speak in the most flattering terms of the good our humble efforts have accomplished during the past year.

We should be pleased to receive more frequent communications from the numerous able writers in Canada. Will they not favor us? The Secretaries, or other officers of the Societies, could send us much information that would be interesting, and some of them have promised to bear it in mind.



Double Hinge Harrow.

Editors New Genesee Farmer:—

GENTLEMEN—I send you a draft of a double-hinge harrow, of my own invention, which has been highly approved by many who have used it. It differs materially from any in use, it is believed, in two material points, viz: in the motion being better, and in clearing itself from stones, weeds, and other stuff, tending to clog it.

It sweeps 7 feet, and from end to end is 9 feet.

The angle is 80 degrees, or two inches to the foot from a square.

The timber is 6 feet long and 3 inches square.

The teeth are 7-8ths of an inch square, and 9 inches long.

The hinges are straps of iron, 7 inches long, with holes in each end, and bolts to pass through with keys. The hook or eye, to hitch to, should rise 7 or 8 inches, to prevent the forward end from being lifted by the draught.

The cross pieces are let in on top, and fastened with bolts and screws.

THOMAS HUNT.

Fall Creek, Dec. 18 90.

The Durham (U. C.) Agricultural Society.

The annual meeting of this spirited Society was held at Port Hope, Jan. 15. By the reports of the Secretary and Treasurer, it appeared there was a balance in the Treasury of one hundred and two pounds seventeen shillings and eleven pence.

The following officers were elected for the present year:—

President.

DAVID SMART, Esq., Port Hope.

Vice Presidents.

ALEXANDER BROADBENT, Esq. of Hope,

R. W. ROBSON, Esq. of Clarke,

JOHN KNOWLSON, Esq. of Cavan,

JOHN SMART, Esq. of Darlington.

WILLIAM SISON, Esq. Treasurer.

MORGAN JELLET, Secretary.

And ONE HUNDRED DIRECTORS in different parts of the country.

H. COLMAN'S ADDRESS,

BEFORE THE AGRICULTURAL AND HORTICULTURAL SOCIETY OF NEW HAVEN CO., CONN.

We often feel a desire to lay before our readers more of the able addresses and other excellent articles which we find in our exchange papers; but were we to do so, we should be compelled to omit many of the favors of our esteemed correspondents; and we are aware that most of our readers generally prefer that which is written for their particular benefit. We should do them injustice, however, were we to confine our columns to original articles; for many valuable discoveries and improvements are made in different places, and published in other journals, and it always stimulates and pleases the mind to learn that other people, in various places, are actuated by the same spirit, and engaged in the same enterprise as ourselves.

No man at the present day, in the United States, occupies a higher rank, as an advocate of improvement, or a delineator of the pleasures and advantages of a rural life, than HENRY COLMAN; and no man is doing more to elevate the noble profession of Agriculture to its proper standard, than him. We are led to these remarks by reading the address as above named. We cannot afford room for the whole of it; but we are sure our readers will derive both pleasure and profit from the following portions.—EDS. NEW GEN. FAR.

THE FARMER NEED NOT BE JEALOUS OF HIS NEIGHBOR.

No occasion of the gathering of the people is less liable to objection, or more congenial to benevolent and pious sentiments, than that which has brought us together.

Here, a spirit of good will reigns over the whole. No discordant or hostile feeling can find place. No strife and no emulation can find place, but an emulation for excellence, which alike benefits all, and in improvements, which diffuse themselves over the community, and the sole aim of which is the common welfare. To well disposed minds, this is a religious occasion of the highest character. None is more suited to lift up the soul in adoring confidence and gratitude to the great Author of nature. He it is, who "causes grass to grow for cattle, and herbs for the service of man." He clothes the flowers of the field with a splendor, before which the gorgeousness of oriental luxury is dimmed. His benevolent agency operates every where in the teeming earth, the swelling bud, the golden and crimsoned fruit; in the vapor, the dew, the air, the heat, the light, in all their mysterious influences. He is the source of all felicity, health and beauty.

THE ART OF LIFE IS THE ABILITY TO OBTAIN FOOD.

Agriculture is the great art of life. In an economical view it constitutes the subsistence of man. Eating and drinking are deemed vulgar employment; yet who, even among the exquisite of the transcendent school, is not compelled to conform to the fashion.—The body is often spoken of with disdain, as though there were something degrading in its material elements. In such cases, a reflection is cast upon the divine skill and beneficence in one of their most wonderful exhibitions. But is there not an electric chain of sympathy between the body and mind? What is to become of our philosophy without bread and meat?

How is genius to speed her flight, or the fires of the imagination to be kept bright, unless the same body, the dwelling place of the ethereal guest, be maintained in its health, elasticity and vigor. It is calculated that if the harvest of a single year should fail, the whole of the human race must perish. In our latitude the earth yields nothing unasked and unwooded. All of food and of clothing, all that sustains and protects the body, is the product of agricultural labor in some of its various forms.

THE PRODUCT OF LABOR IS THE ONLY REAL WEALTH.

Agriculture is the foundation of wealth. The sea renders her tribute; but the earth presents to skill and industry richer and infinitely varied contributions.—Money is not wealth. It is only the representative of wealth. Money is coveted because it can command labor; but of what use would it be, if labor would not be commanded? What would it avail to possess all the riches of Potosi, if thereby we could not acquire the products of agriculture? What are the manufactures concerned in but these products? What freights

the barks of commerce in their liquid flight, threading every channel and whitening every port, but the products of agriculture? What constitutes the wealth of the country but her cotton, hemp, sugar, rice, tobacco, wool, wheat, beef, and pork? Agriculture only can be considered as the creator of wealth. The merchant, the manufacturer, the sailor, the various artisans and tradesmen perform their part in making the products of agriculture more valuable; but they cannot put them so that the advantages of climate are equalized, and in putting them in a condition for use; but agriculture alone produces. Like the leader of Israel, she strikes the rock, the waters flow, and a famishing people are satisfied. She supplies, she feeds, she quickens all. Agriculture is the commanding interest of the country, with which no single interest, nor indeed all other interests of a secular nature combined, can be brought into competition.

AGRICULTURE A SCIENCE DISCLOSES A MINE OF WONDERS.

Agriculture deserves the attention of liberal minds as a science. Like many other sciences, it is in its infancy. We have broken only the outer crust; but it comprehends the mysteries of philosophy. It involves the whole science of life in the vegetable and animal kingdoms; the miracles of actual production, and the power which man may exercise in modifying vegetable and animal existence. The rearing of a tree, the maturing of a vegetable, the production of a flower, the forming of a race of animals, with shapes, and dispositions, and qualities, modified to a great extent according to your wishes, are in themselves miracles of a power delegated to man, which an intelligent mind recognizes as divine.

Whoever, looking at a dried seed and kernel, considers what it may become, when the plant shall yield bread or the tree spread out its branches loaded with fruit, whoever considers the nature of the life which lies buried in this shell, and reflects upon the combined influences of earth, and air, and moisture, and heat, and cultivation, in their inseparable operations, all requisite in precise times, quantities and modes of application, to bring it to perfection, will perceive subjects of inquiry suited to occupy the most gifted intellects. As he approaches this mine of wonders, his bosom will pour with an irrepressible curiosity to gain admission into the hiding place of the Divinity, and to quench his burning thirst at the original fountains of power, life, intelligence, and light. Geology, chemistry, botany, all the branches of natural philosophy, natural history, in its diversified departments, animal and vegetable physiology, comparative anatomy, mechanics, meteorology, all are involved in an improved agriculture. The nature of soils has been long a subject of philosophical investigation; and that, with the application and operation of manures, seems now to be holding in reserve for chemistry its most brilliant triumphs. Do I offend a fastidious ear by a reference to a topic so humble? In looking at the master-piece of human genius in sculpture, the Venus de Medici, the vulgar mind brings away from the contemplation no higher sentiment than that it is naked. The pure and disciplined mind hardly conscious of this fact, and feeling the responsive movements of the divinity within itself, admires with adoring wonder the triumph of genius in this sensible embodiment of the highest beauties of form in the works of the Creator. So it is with other objects in nature, so much depends upon the eye with which we look at them. The vulgar mind, in the heap of manure by the road side, thinks only of its offensiveness and corruption. The well disciplined mind regards it as an element in one of the most affecting miracles of the Divine power, and adores that beneficent agency, which, in its mysterious operations, converts this refuse into fruits and flowers.

To consider agriculture as mere servile drudgery, is never doing it justice, than to consider chemistry as only the art of mingling acids and alkalis, and handling pots and retorts, and crucibles, and filters.—Let the man of cultivated and philosophical mind approach the subject of agriculture, and he finds "sermons in stones and books in the running brooks."—Let him engage in its humblest labors, and the same golden furrow, which is to bear upon its inverted surface the golden grain to nourish his animal life, will produce bread to eat, which common minds know not of, to nourish his intellectual and moral being. There is not one of the natural, or what are called the practical sciences, which may not have a bearing upon agriculture. It is with agriculture as in other cases, that mere theory will make no man a farmer. The common processes and the successful execution of the common labors of husbandry can be learned only by practice. He who would handle a plough well, must have been accustomed to walk in the furrow; as the only safe pilot is the man who has been practiced to

stand at the helm. But to think that because we have done these things, that therefore we understand agriculture, is as wise as for the man, who should wade up to his ankle in some puddle left by the receding water from the sea shore, to pretend that the ocean is not very deep.

The nature and use of soils, the artificial combination of them in different cases so as to effect the large growth and productiveness, the nature of manures, their uses, application, operations, and infinite varieties, their mechanical influences, and their chemical effects, the varieties of grasses, grains, plants, fruits, which are or may be cultivated, the habits of vegetables and the propagation of new varieties, the influences of light, heat, and air, and dew, rain, and electricity upon vegetation, and how they may be controlled by human industry, all the history and habits of the domestic animals and modes of rearing them to the highest degree of perfection, the construction of farm implements so as to combine the greatest effects with the least expense power, the history of agriculture, its condition and improvements at home and abroad, rural labor, rural architecture, agricultural education, the intellectual and moral improvement of the agricultural classes, the connection of agriculture with national wealth, and with its great sisters, manufactures and commerce, all are its bearings upon domestic and public happiness upon domestic morals—these topics, among others which might be named, show that agriculture not destitute, to a philosophic mind, of matters of profound scientific inquiry.

"TRUE POLITENESS" IN THE COUNTRY AND THE CITY.

Agriculture, as a pursuit, commends itself to persons of refined taste and sentiment. I know how small shall the car of city fastidiousness by such an assertion; but I rely upon your candor that I shall not offend by the expression of my honest convictions. There is much in the country that is vulgar, rude and offensive. There is no occasion for this. This is the fault of the country. But is there more of it in the country than there is to be found in cities? The things depend much upon ourselves. The artificial forms of social intercourse do not prevail in the country as in the town—at least they are not so common but it is often delightful to lay aside, at least a while, the buckram and the starch. I have been through life familiar with all classes of people. I have been for many years a citizen among cities, and a farmer among the farmers. I have been a frequent visitor in city palaces, and many a time an indweller in the humblest mansions in the secluded parts of the country; and I must say, without derogating from the refinements of the most improved societies in the cities, that the comparison in respect to courtesy and civility would not turn out to the disadvantage of the country. True politeness is not matter of mere form or manner, but of sentiment and heart. There is no sober judgment pronounce it as a great rudeness to seek knowingly away from the door of one who entertains a friend by a servant with a lie put in his mouth as to be received by the kind woman who welcomes us heartily at her wash-tub, or her spinning-wheel and sweeps a place for us without apology to sit down at her kitchen fire. You may tread your beautiful valley from the ocean to the mountains; you may, I have done, follow the silver stream, whose homestead name is borne by your Commonwealth, from the place where it deposits its contributions in the mighty treasury of the sea, to its gushing sources under the snow-capped summits of the north, and traverse every Suabian border, and be loved by its gentle waters, and give manners on your part will generally be met with corresponding civility. Excepting among the vicious and depraved, you will find no rudeness unless you are unfortunate as to provoke it by your own arrogance.

It is folly to carry city manners and customs into the country. This destroys the simplicity which constitutes the charm of rural life. If you have no taste for rural pleasures, no interest in rural concern, a disposition for rural labors; if you are afraid of soils, your hands or browning your cheeks; if you make no friends with the flocks that whiten the field, nor the birds that make the hills and forests vocal with melody; if you are unwilling that the earliest rays of the dawn should disturb your repose, and your heart be with no enthusiasm in golden sunset, then flee the country as you would the Siberian desert. It would be to you only a land of discomfort and solitude.

AGRICULTURE THE DELIGHT OF GIFTED INTELLECTS.

But it is otherwise with many minds. Agriculture

culture, far from being diademed, have been crowned with the chosen pursuits, the purest delights of the most gifted intellects; and their nature in these pursuits burnt with increasing intensity to the close of life. From the turmoils of war, the struggles of political ambition, the harassing pursuit of successful trade, the busiest scenes of life, the forum, the senate, and the throne, they have fled to the humble occupation and pleasures of life and labor, and have found the precious which they had so long sought, only in this philosophy of nature.

The philosophy of nature, the land of poetry, and the home of the imagination, as much as it is the home of the philosopher. The charms of the country are universally acknowledged even in cities, when you see the country people, who live in cities, love to get a grass plot, not larger than a handkerchief, before their door, or train a woodbine or a honeysuckle to their windows, or crowd their windows with flowers, or admit persons with a floral wreath. The first of the muses were dedicated to rural life. In the golden harvest, in the verdant meadow, the smooth carpet beneath your feet, in the cool air of verdure radiant with the richest tints of autumn, in the deep and solemn forest, the murmured lake, resting in perfect distinctness among the beauties of forest, in the flowers, in the fragrance of the air, in the image of eternity, in the mountain life, in the red-dawning dawn, in the boundless expanse of the sea, in the mangled splendor of the sunset, in the mingled splendor of the forest, there is every thing to kindle the imagination and dilate the heart. When in the advancing of the day, witnesses the waking up of the world, beholds the desolation of winter rapidly retreating before the empire of spring, and sees day after day, hour after hour, new forms of vegetable life starting into existence, it requires no effort of the imagination to behold a new Eden before him, and to hear the chorus of the morning, and "the song of God shouting for joy."

SYMPATHY, MORE CHARITY, A HIGHER VALUE SET upon HUMAN LIFE IN THE COUNTRY THAN IN THE CITY.

In the making of the moral aspects of agriculture, I make no invidious comparisons. The country is full of temptations to vicious indulgence as well as to virtuous life; perhaps it may be said fewer temptations. Agricultural labor, unless pursued to excess, so far from being exhaustive and destructive, is much more labor, is friendly to health, and is much more intellectual vigor and length of life. The country is much stronger in the country than in the city, because we are more dependent on the country, and have fewer objects to engross our attention. Human life seems more valued in the country than in the city. In the crowded city men of the stream, and the vacancy is instantly filled by the rushing torrent, and scarcely produces a conscious emotion. When a valuable man dies in the country, the whole village mourns for him.

There is more of real kindness and benevolence in the country than in cities. The citizen is full of magnificent charities, the country is full of the charity of kind offices. In the country, if a man is sick or afflicted, the whole neighborhood is prompt to visit him, to aid him by personal service, to watch night after night at his sick bed, which cannot be so. Cities present some of the worst cases of friendlessness to be found in human history. Persons suffer, and sick, and die, and are buried, and the cognizance of those living under the same roof and on the same floor. In the country, each character has a higher value than in cities. In the country, every thing is absorbed in the great whole of sympathy and pleasure; and in crowds, presenting a variety of character as of costume, men pass by without observation. In the country every thing is known, observed, and watched. His character is the common property of the village. This is sometimes complained of in the country as impertinent and intrusive. This may sometimes be true, and it may become annoying; but it is not so much as the complaint of it. That it has a favorable influence upon good morals which, under the influence of human nature, need every security, there is no doubt.

The healthful labors of the country, the early rising, the simple diet, in the open air, in the virtuous life, in the general good morals which prevail, in the sympathy and mutual interest in each other's character and welfare, which bind such communities together, in the absence of multiplied temptations and facilities of vice, which prevail in more populous communities, an agricultural life is highly favorable to virtue.

PHILOSOPHY, REFINEMENT, MORALS, THE CONCOMITANTS, AND ARTS OF AGRICULTURE.

I hope I shall be excused for dwelling so long upon the advantages of agricultural and rural life. Agriculture has been too long denied the rank which belongs to it among the pursuits of mankind. I would speak of it as one of the highest pursuits of philosophy. I would gladly commend it to persons of refined sentiment, as abounding in scenes, objects and associations, full of gratification to the most cultivated mind; and for its moral securities and moral influences; it needs no recommendation in a community like yours, presenting in its beautiful villages, among its swelling hills, and its richly cultivated vales, in the character of its rural population, such emphatic demonstrations of improved education, of correct morals, and of the best influences of religion.

I have here glanced at these topics, because I would not omit any upon your indulgence. I have done this with the most honorable motive, the tendency of our young people, impelled by avarice or by false views of happiness, have been to forsake the wholesome pursuits of agriculture, where they found health, competence, and a manly independence, for occupations in the cities, oftentimes of the most servile character; degrading to their self-respect, corrupting to their passions, and proving often the grave of their virtue. Our cities likewise are crowded with young men of professional education, who, with hearts aching from hopes deferred, linger along from year to year until the health is exhausted, habits of indolence are induced and confirmed, and the best portion of life is wasted away without the accomplishment of any valuable object, or the enjoyment of those domestic ties, in which Heaven designed that man should find the strongest security of virtue and the purest fountains of happiness.

AGRICULTURAL IMPROVEMENTS BETTER THAN SPLENDID HOUSES.

I would likewise gladly commend this subject to another class of individuals, whose attention I fear, however, I shall presently lose. Whoever visits our great cities is constantly struck with amazement at the enormous expense and splendor of many of the private residences; at the extravagant piles of brick and stone, seldom half tenanted, and adapted to real comfort and convenience in an inverse ratio to their inordinate size and their wasteful magnificence. I would seldom, indeed, advise a person, accustomed through the prime and middle of life to the excitements of business, politics, amusements, and general society in the cities, to go at once into the seclusion of the country, especially at that period of life when the vitel current becomes sluggish and the physical powers lose their wonted energies; but it is not difficult for such men when their fortunes are made, to enjoy the advantages of the city and the country together. Let them pass, if they please, their winters in the city; but what immense benefactions might they confer upon society, and what sources of agreeable and useful occupation might they find for themselves, if, instead of spending their fifties or their hundreds of thousands on a brick or stone castle in the city, which they have seldom the means of enabling their children to occupy, and which must therefore, in the course of nature, soon change hands, they would expend some three-fourths of that sum in subduing, cultivating and improving some hundreds of acres in the country, rendering them productive, and planting upon them industrious families. They would breathe into the hearts of their benefactors, the purest pleasures in welcoming them, whenever they came among them as their best friends. This seems one of the most useful, as it is certainly one of the most innocent purposes to which wealth can be applied.

CAN AGRICULTURE BE MADE PROFITABLE?

But I must pass on to other topics. The next question then which arises in this case, is whether agriculture can be made profitable; and especially whether it can be made profitable in New England? This is a great question. I can only reply briefly, without going into the various illustrations which might be presented. I will here express my thorough disgust for that inordinate and grovelling avarice, which can find no good but in the accumulation of dollars and cents. Wealth is to be valued for its uses, not for its amount; and a philanthropist can look with sorrow and alarm upon that heartless and frenzied spirit of accumulation, which at one time, like a terrible epidemic, threatened to lay waste all principle and honor, and to render contentment, competence, and reasonable and

moderate desires, matters of pure romance, which had some where read of in our childhood. By the righteous laws of Divine Providence, that inordinate thirst for gain without industry, temperance, or frugality, has been so signally rebuked that it will not again immediately show itself. There may still be the appearance of life in its quivering limbs, but few will have courage or power to attempt its resurrection.

In the southern portions of our country, favored for the purpose by its peculiar climate and soil, we hear of agricultural returns in their great staples, which confounded the humble calculations to which we in New England are accustomed. Yet there are plantations in the case, in the perils to health, and in the nature of the labor by which these products are procured, which, save where the heart is cankered with avarice and inhumanity, at once relieve a New England man of all envy of such success. The tact likewise presents itself in the case, strange as the anomaly may seem, that the southern planters are not richer than the northern farmers; they have not so many of the real comforts of life. Many a New England farmer is more independent with his income of a few hundred dollars, than a southern master of his uncounted acres and his hundreds of slaves, with his income of many thousands. I do not say these things in the spirit of invidious comparison; I would not mar the pleasure of the occasion by awakening a single unkind feeling. But we may learn, from the facts in the case, a lesson of gratitude, that we are permitted to breathe the bracing air of northern mountains and seas, and the still more invigorating atmosphere of equality of condition and universal freedom.

Agriculture in New England presents no brilliant prizes to the mind bent solely on the accumulation of wealth. Yet rough, barren, and inhospitable as New England seems to many persons, yet I can show you, in every town from Lake Champlain to the Aroostook, and from Snybrook to the Canada line, not a few examples of men, who by farming have maintained their families in health and comfort, and educated their children well, and if so they pleased, found the means of sending one or more sons to college; exercised, as far as they had occasion, an unstinted hospitality; contributed their full share of the public duties, and are now enjoying the evening of life with an honest conscience and a competence for every reasonable want. The house, in such case, may appear moss-covered and brown with age. No burnished lamps light up its halls, and no carpet soft as down cover its floors; but infinitely preferable is such a dwelling to palaces, where once wealth, the product of defrauded labor, illuminated every room, and revelry and luxury held their frequent court; and where now, though bankrupt, has long since entered, men are still living upon the fragments of former luxury or upon hoarded gains, in defiance of justice and honor.

ADVANTAGES OF HIGH CULTIVATION.

Further, my inquiries have satisfied me, that there is not a single crop well cultivated in New England, which in ordinary seasons will not pay a fair rent of the land at current prices, and liberally compensate the labor and cultivation. Our proximity to quick markets gives us great advantages over many parts of the country. In one of my visits to a town on the seashore of Massachusetts, in a region whose rock-bound surface seemed to have set cultivation at defiance, I found several acres of land subdued and improved at the rate of three hundred dollars per acre. Could this be afforded? Look at the case. The land was made to produce three tons of hay to the acre. The price of hay in the vicinity has averaged for years, at least fifteen dollars. The value of one ton of hay per year, is sufficient to gather the crop and keep the land in condition. Thirty dollars then are the net return for the investment. These are examples of extraordinary expenditure and ample profits. The crop of Indian corn is the greatest blessing of our country. The average crop in New England is thirty bushels. It is not difficult to produce fifty to an acre. I have known one hundred and eleven produced on an acre in Massachusetts, as measured after shelling and dried. At fifty bushels per acre, raising the rough fodder as equal to a ton of English hay, and the grain at seventy cents per bushel, the return may be considered as equal to fifty dollars. Thirty dollars may be considered a high average price for cultivation, and this including the interest upon the value of the land at fifty dollars per acre.

(We here omit the sections entitled "Comparative Products, and Income of the East and West," "Great Improvements in Stock and Agricultural Imple-

ments," and his remarks on Silk Culture.—(EDS. PALMER.)

COMFORTS OF A NEW ENGLAND WINTER.

The long winters of New England are often complained of. But let us look at this. The season of cultivation is long enough for the maturing and perfection of all the vegetable products which the climate and soil are capable of producing; and these embrace an abundance and profusion of the most valuable grains, grasses, vegetables, and fruits, for the whole year. The temperature is favorable to labor. The long winters bring with them opportunities of social intercourse of the most delightful character. While the bracing air of winter gives elasticity to the muscles and vigor to the mind, it affords, in its leisure from out-door labor, the most favorable opportunities for intellectual improvement. The farmer, in this respect, has advantages which fall to the lot of few other conditions in life. Happy is it for him, when an enlarged education and a taste for books and scientific inquiries enable him to improve them to the greatest advantage. Under these circumstances, no condition in life, to a man of reasonable desires, whose heart is not poisoned by avarice or ambition, seems more privileged or more enviable.

I have said that agriculture as an art, is as yet imperfectly understood, but it is encouraging to contemplate the improvements which have been made in it within the last half or even quarter of a century, and the rapidity with which it is still advancing.

HORTICULTURE AND FLORICULTURE.

Among the interesting exhibitions of this season, Horticulture and Floriculture have presented their liberal contributions. In the variety and perfection of Indian corn, esculent vegetables, and the most valuable fruits, we see every reason to be satisfied with our local condition. If peculiar obstacles to their cultivation present themselves in the soil or climate of New England, we may with an honest pride congratulate ourselves upon that industry and skill, which in defiance of such obstacles successfully produces them in abundance and perfection.

Flora, likewise, on this charming occasion, holds her court among you, adorned with more than oriental splendor. In the two great floral kingdoms of nature, the botanical and the human, if we must yield the palm to that which is alike transcendent in the beauty of form and motion, and in the higher attributes of intelligence, innocence and moral perfection, yet it can be no derogation to admire, with a rapture bordering upon enthusiasm, the splendid products of the garden; and especially when their beauties are combined and arranged as on this occasion, with an exquisite and refined taste. What is the heart made of which can find no sentiment in flowers? In some of the most striking displays of this occasion, in the dahlias for example, we see what can be done by human skill and art in educating and training a simple and despised plant, scarcely thought worthy of cultivation, to the highest rank in gayety and glory and ever varying perfection in the aristocracy of flowers. We may learn from such success, a lesson of encouragement in the education and training of flowers of an infinitely higher value and perfection.

The vast creation of God, the centre and source of good, is every where with beauty. From the shell that lies buried at the depths of the ocean to the twinkling star that floats in the still more profound depths of the firmament, through all the forms of material and animated existence, beauty, beauty, beauty prevails. In the floral kingdom it appears in an infinite variety, in an unattained and even rich profusion than in other departments of nature. While these contributions are thrown out so lavishly at our feet, and a taste for flowers seems almost an instinct of nature, and is one of the most innocent and refined sentiments which we can cultivate, let us indulge and gratify it to the utmost extent, wherever leisure, opportunity, and fortune give us the means. There is no danger of an excess under these reasonable restrictions, which all our sentiments demand. "But, says some cynical objector, 'flowers are only to please the eye.' And why should not the eye be pleased? What sense may be more innocently gratified? They are among the most simple, and at the same time among the cheapest luxuries in which we can indulge.

Taste for flowers, every where increasing among us, is an omen for good. Let us adorn our parlors, doornways, yards, and roadsides, with trees, and shrubs, and flowers. What a delight do they give to the passer-by? What favorable impressions do they not once excite towards those who cultivate their own gratification, and find, after all, their chief pleasure in the gratification they afford to others. What

an affecting charm, associated as it is with some of the best sentiments of our nature, do they give to the sad dwelling places of the departed and beloved.

The moral influences of such embellishments demands our consideration. I do not mean merely the substitution of such refined tastes and pursuits in place of the gratification of the lower appetites. This is no small matter. But another influence should not be overlooked.

Every one familiar with human life must be sensible that mere personal neatness and order are themselves securities of virtue. As we cultivate these habits and in respect to our residences and the things and objects around us, make a study of rendering them orderly and beautiful, and of adding to them the highest embellishments of art, our own self respect is greatly increased. Next to religious principle nothing operates more than self-respect, as a safeguard to virtue and a stimulant to excellence.

"HOME, SWEET HOME."

The direct tendency of all such embellishments in our grounds and habitations is to multiply the attractions of home, and to strengthen the domestic ties. It is the glory of New England that these precious ties are no where stronger or more sacred. I would bind her children if possible, by chains a thousand times more enduring. In all my journeyings into other lands, favored as they may be by the highest advantages of climate and soil, I come back to New England with all the enthusiasm of a first love, and a filial affection which, if possible, has only gained new strength from absence. Indeed there is every thing in her to love and honor. Let us seek to render every spot of her rude territory beautiful. To the eminent picturesqueness of her natural scenery, adding the triumphs of an industrious, skillful, and tasteful cultivation, every substantial want of our nature will be supplied, every refined sentiment of the mind gratified; and the true New England heart will seek no other Eden this side of that better country where flowers bloom with a radiance which never fades, and "one unbounded and eternal spring encircles all."

A Correction—Feeding Berkshires.

MESSRS. EDITORS—I wish to correct a small mistake that appeared in the published report of the committee on Swine, appointed by the Tompkins County Agricultural and Horticultural Society to report at its last annual fair. It is contained in the extract you have made from that report (on page 24, last month.) It reads "Fat, 8 $\frac{1}{2}$6 $\frac{1}{2}$9." It should be *Fect*. The error is a small one, but is somewhat important, as it shows the difference in the coarseness of the three animals. I made another experiment the past fall in cutting up two three-quarter blood Berkshire hogs, and found the result to correspond very nearly with the table you have published, although the hogs were heavier, weighing 260 each.

The reading of T. C. Peters' valuable letter on the subject of "Piggery and Pork Making," induces me to give you a short account of my method of wintering sows, consisting of ten full blood Berkshire breeding sows, three full blood Berkshire boars, and sows of different ages, to make in all twenty-two. These I have shut up in lots of from two to four each, and feed them twice a day, say morning and evening, with one cent's worth of boiled corn each—corn at 3s. 6d. per bushel—or 1 lb. 4oz. each, before it is boiled. I boil the corn about twelve hours by putting it over the stove in the morning in a copper boiler, and let it cook through the day—let it cool in the night, and feed it the next day. I find that twenty-eight pounds of corn, when boiled will weigh sixty-eight pounds, and it increases as much in bulk as in weight. I feed no water nor slop of any kind to my hogs; they have nothing but the boiled corn, and they come out in the spring in as good condition as they were in the fall. This is the second winter that I have pursued this practice. I have also tried the plan of boiling potatoes and ruta baga, and mixing bran, shorts, &c. with them, to make swill; but it costs more that way than on boiled corn.

I wish to inquire of Col. Sawyer whether the portraits that you gave of his Berkshire swine are cor-

rect in their proportions. If they are not they tend to mislead the public; but if they are they add value to your journal. It is a subject hope gentlemen giving portraits of animals will be careful about,—that the beauty of the portrait depend on the excellence of the animal and not skill and fancy of the artist.

Yours respectfully,

E. CORNELL

Ithaca, Tompkins Co., Feb., 1841.

Remark.—The Portraits are pronounced correct.—EDS.

Maple Sugar.

The following communication contains extracts on the subject of making maple sugar, two leading requisites for success, we believe, boiling the sap as fresh from the tree as possible, the most punctilious cleanliness in all the operations. As the season for this work will commence, we recommend the remarks of our correspondent to those interested, as well as those S. Chew, from the Ohio Farmer, published last on page 45 of this journal. We believe it to be easy and economical, by proper management, to be useful, white, crystalized maple sugar, as the most, dirty looking, brown substance, which generally in fact, the very cleanest production of a material world.

MESSRS. EDITORS—Having seen in your paper inquiry for making a vat or box for boiling sap, having long wondered that so little attention was paid to making maple sugar, I give some of my own experience in relation to it. I have been surprised to find so little disposition to improve the usual method of catching the sap in troughs, and boiling it in a bung on a pole, by which it is filled with all manner of filth, and the article of maple sugar, (the pure all sweets,) rendered unwholesome and forbidden it comes into market.

From twenty years' experience and observations using kettles in various ways, I have adopted a plan of iron pans, which are here coming into common and have been used for ten or twelve years with success. Pans with sheet-iron bottoms and wooden sides did not succeed well. The pans are simply sheet of Russia iron turned up at the sides and about three inches, and will hold about twenty-two inches while boiling. A rim of band iron is rivetted to about one inch wide, with rings as handles. The cost of a pan is about \$4. Two or three are lengthwise on an arch, built of stone; from one half to two feet in depth, and about twenty inches breadth, the pan being about twenty-two inches. The arch should be even on top, and a wide board wrought or cast iron across the arch between and under the pans to prevent the heat from the fire reaching the sides. The pans are slid off when emptied. The sides of these will boil about as much as a cauldron will.

I have for some years past used six, set three on each side, side by side, and have about six hundred trees buckets for the same, and average about twelve hundred pounds per year of sugar, which fetches eight cents per pound, and the profits are from \$80 to \$100. This is done at a season of the year when little can be done on a farm.

The sugar boiled in pans, I believe to be ten percent better than in kettles, other things being equal. To make maple sugar as it should be, much care is needed to keep every thing used about it clean and sweet, and the sap should be boiled as soon as it can be to prevent fermentation. Maple sap of itself has no color, and if it could be crystalized without heat would be white and transparent, and the sweetest of purest kind. Much is said about cleansing sugar, I

remedy is to keep it clean. Penicillin or other put into the syrup while over the fire, will the acidity caused by fermentation.

GEO. HUMPHREY.

ord, Feb., 1841.

Prices favorable to National Exports and National Wealth.

Editors.—Within the last two weeks 12,000 barrels of flour have been purchased at New York, for shipment to England. Because to be consumed there, it must pay 50 cents freight, \$3 duty in the English port, and agents commission, &c., which will make the consumer in England about \$8.50 per

in spite of the duty of \$3 per bbl. on American flour in England for the protection of her agricultural interests, the profits are very much reduced and competition of our bread stuffs in their own

lands of free trade in the United States, may the above facts to show the bitter fruits of a protective tariff. They say that it only inflates at home, thus enabling the British manufacturer to sell us not only in the foreign market, but at our own ports. The experience of the last two months positively shows that the low prices of our agricultural productions have had the effect to treble the prices of manufactured articles, a consummation which could not have taken place under a protective tariff. With high prices for the necessities of life, frequent high prices of labor.

The agricultural staples of a country are sold at the prices, the price of manufactured articles consumed, both become substantially the articles of the country gets out of debt much more than it would if prices were so high as to stop our own. Another and paramount advantage to us, from the low prices of its productions, is that it gives to our maritime commercial interests no longer hear of ships rotting at the wharves, they are busily employed carrying the produce of our soil and our work shops to every part of the world.

England take off the duty on American flour, would not English corn have to fall in price as a consequence, or be driven into the granaries of the world? Certainly it must, and the world would be that all manufactured articles in England would be sold at correspondent low prices. Our manufactures would then more successfully compete with our own, in our markets in spite of our tariff, and they would effectually drive our manufactures of the great South American and other foreign countries.

Although we are opposed in the main to a tariff for protection, we feel that a tariff for revenue would be so demanded and increased as to act as a retarding duty, while it also protects those of our American industry which have already succeeded in the absence of all protection.

And that every hoghead of tobacco shipped to France is an impost there of \$300. As France produces tobacco, this duty is ten fold as on our American tobacco planters, as the operation of the laws of England can be to the wheat of the United States, as our foregoing remarks explain. Hence we premise that the most ardent advocate of free trade will not oppose countervailing duties on French silks and wine. We have numerous communications shown that the balance of trade against us with France is more than 14 millions annually. A balance which has heretofore been made up by our exports of cotton, wool, and other goods to England, State Stocks, United States Stocks, &c. &c. But since the failure

of both States and Bank, ought not such excessive free importation to be asked?

S. W.

Cause of the "Decay of Ruta Baga."

Messrs. THOMAS & BATHAM—I see in your paper of January, an inquiry made by Silas Pratt, of Chili, as to the cause of his Ruta Baga rotting.

I have, the last fourteen years, cultivated both the sugar beet and ruta bago, raising from 2000 to 3000 bushels for my cows. I have almost invariably found that when I sowed early my roots were more or less rotted. In 1839 I lost most of my crop from that cause, having sowed the seed as early as the first of June. The last season I sowed from the 15th to 20th. I had scarcely a defective one. I have always observed that those which are sowed early grow very rapidly at first, but are generally checked in their growth by the heat and drought of July, in which state they remained until the fall rains set in, when, from so great a change from drought to excessive moisture, the roots crack open, rot, and disappoint the expectations of the farmer. Should these suggestions prove of service to Mr. Pratt, or any others who have met with a similar disappointment, it will give pleasure to

A NEW SUBSCRIBER.

Roxbury, Mass., Feb., 1841.

For the New Genesee Farmer.

Rats and Rat Catching.

Messrs. Editors.—The sagacity and cunning of this little animal are really extraordinary, and its daring courage is truly remarkable, considering its small size. Although almost every body can produce a budget of stories about rats; yet how few are there who have accurately observed their habits, or even sufficiently to rid themselves of such destructive vermin; and it here occurs to my mind that I have never seen the subject treated on in an agricultural paper. We may often see people carefully baiting traps in a place where rats are swarming, and marveling that none can be tempted to enter; when the simple reason is that from want of a little consideration, the sagacious instinct of the little animal is a match for the bad attempts made to capture it. The black rat (*Mus rattus*) is characterized by the body being black above, while the brown or Norway rat, (*Mus decumanus*), has the upper part of the body covered with light brown hair, and whitish underneath. The black rats are not very numerous, because the brown rats prey on them whenever they meet—the brown rats did likewise in keeping their own species in check, a large rat being the terror of the small ones. If it were not for this fact, we should surely be overrun, for they are very prolific, breeding three times a year; producing from ten to twenty in a litter.

The enemies most dreaded by the rat are the common weasel and the ferret. These little creatures, in proportion to their size, are more blood thirsty and daring than the most tremendous and rapacious quadrupeds. A cat or dog cannot follow a rat into its hole, consequently they are of little use, compared with the weasel or ferret. Only turn a single one down a rat hole, and the horror and alarm created is soon manifest. The rats fly with all possible speed, the ferret pursuing and darting at the neck. I have been acquainted with several men who followed this occupation, and they told me that their ferrets were frequently wounded severely, sometimes losing an eye in the conflict; but the moment it fixes itself on the neck, its victim is secured, for it cannot be shaken off until it has drained the life blood.

Farmers may sometimes drive away rats from their premises in the summer season, by blocking up their holes with broken glass, [or blacksmith's cinders.—Eds.] and plastering them with mortar, repeating the process wherever new holes appear.

Among other expedients, I have tried a box balanced on a stick, with a bait on the end. One morning I found my box down, and on raising it I found no rat, but a quantity of little chips, for the little rogue had gnawed his way out; but this I remedied with a narrow strip of tin round the lower edge. Another way is to snare a rat, (when caught,) all over with spirits of turpentine, set it on fire, and start him into one of the most frequented holes. A friend once told me that he took a full grown rat, and first cutting off his tail and ears, he singed off the hair, and fastened a fringe of stiff writing paper round his neck and let him go; but the whole body politic did not choose to be scared for one unlucky vagrant.

Now, my advice to any of your readers who may be troubled with rats is, to procure, if possible, a weasel or ferret, and turn him into the principle holes about once a month. But if neither can be procured, try the expedients above mentioned; but in case of these failing, the rats may be materially checked by persevering in the use of traps, baited with the following mixture:—Take of oatmeal one quart, one grain of musk, and six drops of the oil of rhodium. Put the musk and oil into sufficient sweet milk to moisten the meal; then mix all together in a stiff paste. The oil of rhodium can generally be procured at a druggist's store; and seldom fails, together with the musk, to draw rats into any place. Caution is requisite to guard against the common cause of trapping, which is the smell of the hand. This can be avoided by using an old knife or spoon.

W. N. H.

Yates Co., Feb., 1841.

Hundreds of thousands of dollars are yearly wasted in this State by the depredations of rats, and the subject is well worthy of attention. Dr. Godman, who says "it (the veriest scoundrel in the brute creation,) though more excusable than some other scoundrels," recommends poisoning them with nux vomica, mixed with corn meal, and scented with oil of rhodium, which he says is very effectual. In using steel traps, a good way is to conceal them in light bran, using a spoon instead of the hands in covering them, although in this case, when the surface of the bran has been profusely baited, we have sometimes seen it marked thickly with their tracks, except directly over the trap.

For the New Genesee Farmer.

The Importance of Indian Corn as a Crop for Man and Beast.

Messrs. Editors.—Humboldt says that the *Musa Paradisica*, misnamed by his translator Banana. instead of Plantain, is to the inhabitants of the torrid zone, what the cereal grasses, wheat, rye, oats, and barley, are to the inhabitants of Europe.

A single bunch of this vegetable weighs from 65 to 80 lbs. It is probable, as Humboldt asserts, that there is no other plant capable of producing so much nutriment, on so small a space of ground,—still, the cultivation of Maize (Indian) corn is much more general in equinoctial America, both for the subsistence of man and beast, than any other vegetable production.—Ought not this single fact to encourage our farmers to give more of their attention to the crop of Indian corn. There is no doubt but that on a first rate soil, 100 bushels per acre may be easily produced. A heavy growth of stocks as fodder, particularly in a dry season, has never yet been duly appreciated; and the working of the soil planted with corn, is a certain means of eradicated those weeds which are so often introduced by manure in the cultivation of the cereal grasses.

S. W.

ERRATUM.—Page 42, Col. 1st, line 23, of this number, for "him" read he.

For the New Genesee Farmer.

Hills and Forest Trees.

MESSRS. EDITORS.—During our peregrinations this winter, which have not been 'few nor far between,' though confined chiefly to this State, we have seen many, very many, beautiful farms; and which we believe might be rendered still more beautiful by a little attention, and at a comparatively trifling expense on the part of the owners, to a portion of them now nearly or quite useless and unproductive.

We allude to the small gravel and sand hills (in some instances calcareous) so common throughout our State, more particularly in the Western part of it. Many of these are so steep that when the surface is disturbed by the plough, (which should never be,) much, and in some instances nearly all the productive portions of the soil is washed down by heavy rains, and finds its way to the plains below; and as these, by this unavoidable process, (if the surfaces of steep declivities are disturbed,) become enriched, the hills become impoverished, and very nearly in the same ratio.

One who has not closely observed these operations, can have no adequate conception of the vast quantity of earth that descends from mountains and hills, when these are disrobed of their natural covering by any of the operations of art, even when undisturbed by cultivation. In many instances these effects are ruinous to both, for years at least, and perhaps would require a century to regain their wonted fertility. Now all this may be prevented, and in our opinion ought to be; and will therefore venture to propose the following beautifying, cheap, and at the same time profitable, method of accomplishing so desirable an object.

Let the owners of these hitherto naked and comparatively unproductive and unseemly hills, provide themselves with a few bushels of chestnuts, black-walnuts, hickory-nuts, butternuts, acorns of the several kinds, as well as the seeds of the pine and locust—in short, all, or any of the seeds of our native forest trees, which fancy, taste, or utility may dictate.—There are also many shrubs that are eminently beautiful, and worthy the attention not only of the horticulturist but of the agriculturist; all or any of them might be selected at pleasure, to beautify, enrich, and adorn these now uninviting portions of their farms. The seeds should be gathered as soon as fully ripe, and sown, without depriving them of their natural covering, broadcast, in November or December. This method is to be preferred for the sake of avoiding that detestable regularity too frequently observable in door yards, lawns, and pleasure grounds, as well as in orchards of fruit trees. The sameness of such a view tires the eye, as does an extended plain without any undulation of surface.

If this has been neglected during the months of November and December, it can be done even now, with as great a certainty of success, as freezing is only required to facilitate the vegetating process. This done, the covering may be performed early in the spring, by means of a shovel plough or heavy harrow—the latter being preferable, as only a slight covering is required; for nature, who never errs, drops them on the surface to be covered only with a few leaves, and the work is completed; and if timely and properly performed, he will not only be astonished by the rapidity of their growth, but in a few years empty rewarded, yea a thousand fold, for all their toil and trouble; and thus these hitherto neglected portions of his farm, be the most ornamental, and probably the most valuable part of his whole domain.

Let none deem this a useless ornament; for whatever beautifies and renders more dear to man his home, can never, by a reflecting and sensible mind, be deemed useless.

"Happy the man whose wish and care,
A few paternal acres bound;
Content to breathe his native air,
In his own ground."

Whose fields with bread, whose herds with milk,
Whose flocks supply him with attire,
Whose trees in summer yield him shade,
In winter fire."

In a future article, should this meet with a favorable reception, we may give you our thoughts on the injuries already done, when little more than half a century has elapsed since the sound of the woodman's axe was first heard in our noble forest, and in his mad career, cherishing malice propense against every tree, bush, and shrub, has well nigh swept the whole from the earth, not only to the great detriment of the soil, but even to the climate and health of our beloved country; and with it the noblest ornament and greatest source of wealth to any country—its majestic forests.

NATURAL CROOK & CO.

Hemlock Hill, near Silver Pond, Jan. 1841.

Military Fines.

An esteemed correspondent, in allusion to that part of Governor Seward's message, which relates to military fines, and conscientious scruples against paying them, suggests, that such persons pay an equivalent of the cost of military service, to be expended in books published by the American Peace Society, for distribution in the common school libraries, and in tracts to be placed in families, for the spread of the principles of peace. He wishes to throw out this hint for publication. As his communication is rather foreign to the objects of this paper, we hope he will excuse us for not publishing it at length.

Farming in Allegany County.

Joseph B. Skiff, of Hume, Allegany co., gives the following average products of a farm in that place for the three past years, as an indication of the state of agriculture there, and not as any thing unusual or extraordinary for that region.

	1838	'39	'40
Winter wheat,.....	16½	17	20
Spring wheat,.....	18½	12	15
Barley,.....	14	25	37
Oats,.....	27	51	40
Corn,.....	50	25	40
Potatoes,.....	300	233	288
Hay,.....	1½	1½	1½

Importation of Silk.

The Journal of the American Society states that the importation of silk into the United States, during the year ending 30th of September, 1839, amounted to nearly twenty-three millions of dollars. Compared with other articles imported, that of silk is one-fourth more than the amount of any other. The amount of manufactures of cotton imported was \$14,692,397; of iron, \$12,051,668; of cloth and cassimere, \$7,078,806; worsted stuffs, \$7,025,893; other manufactures of wool, \$3,567,161; and half the value of silk and worsted stuffs, \$1,169,041; total woollen goods, \$18,831 90. The importation of sugar amounted to \$9,924,632; linen, \$6,731,278. So that the importation of silk nearly equals that of woollen and linen together, and is equal to half of the other fabrics combined.

From the Magazine of Horticulture.

On the Cultivation of the Dahlia.

Agreeably to your desire, I send you a few remarks on the cultivation of the dahlia; and, if you deem them of interest to your readers, you may insert them in your valuable Magazine.

This much esteemed flower, having been for many years a great favorite of mine, I have perhaps devoted more time to its cultivation, and had opportunities of seeing it planted in a greater variety of soils and situations than the majority of your readers; therefore, without hesitation, I give you the result of my experience.

I have invariably found the best general bloom upon those roots which were planted upon a moderately

rich, sandy loam, in a cool situation—if a clay be so much the more favorable—as in hot and dry situations they do not suffer so much from drought, as planted upon a gravelly or sandy bottom.

Planting the roots upon a proper soil, near the gin of a river, or other large body of water, secures the best adapted to ensure a perfect bloom of the exquisitely formed flower, as the continual evaporation from the surface in warm weather, produces dryness in the atmosphere, much more congenial to the nature of the plant, than can be accomplished by any artificial means.*

I admit that cultivators may obtain some very fine flowers from plantations made upon a dry, sandy bottom, but neither will the flowers be as abundant, or as those upon plants growing on the favorable loam just noticed; and, if planted upon a strong, rich soil, the cultivator will have a much more vigorous growth of plants, but with a diminished quantity of blooms.

*These remarks will not apply to the striped and double varieties, so far as regards the soil. An experiment which I tried last summer, with that novelty, *Striata formosissima*, leads me to the conclusion that to bring out the colors, the plants will do best upon a poor gravelly soil, than elsewhere. The experiment was as follows:—

No. 1, I planted in poor, gravelly soil, in an situation, and all the flowers but two were beautifully mottled.

No. 2, I planted upon a soil, as first recommended above, and not one half of the flowers were mottled.

No. 3. Three plants, very highly enriched, each a very bloom but one was self-covered. [The same results have attended our own cultivation of the *Striata formosissima*.—Ed.]

Respectfully yours, T. DUNLAP.
Hartem, N. Y. Nov. 10, 1840.

From the Western Farmer and Gardener To the Ladies.

"No more toil
Of their sweet gardening labor than sufficed
To recommend the zeal, and make us see
More easy, wholesome thirst and appetite
More grateful."—MILTON.

Since the editors of this work are doing so much to enlighten the stronger half of creation, as to the means of securing the solids and durables of life it is but fair that something should be said to enlist attention of the gentler sex, in regard to the ornamental.

Let me be understood, then, as giving you, and all, an earnest request to take up the science of cultivation, in what pertains to ornamental gardening. "Foh!"—says some good house-wife, looking from a portentious pile of stockings—"What use of fuddling and quidding over plants and flowers?" "Dear me!" says a young lady, between sixteen and eighteen, engaged in the momentous pursuits incident to that time of life—"How is any one to find time attend to such things?" "Oh!" says another, adoring plants and fine shrubbery, but then they are expensive! one must pay so much for them, and hire a man to tend them, &c., &c. And there are others, we must confess, even among our own who, should you show them the most peerless of flowers, in its fullest bloom, would tell you quite complacently, "La! that's only a rose, I've seen thousands like it!" To this last class, any argument on the subject of such very common allures would be entirely of no place.

But as ladies in general, and American ladies particular, never do any thing, even to undergoing tightest lacing, and wearing the thinnest shoes in the coldest winter weather, without having good and ancient reasons to sustain them, we must of course give a few solid ones, as to why the pursuit of ornamental gardening is so particularly to be recommended to the

*Of this, we think, there can be no doubt. Mr. Thomas of New York, whose garden is situated at Astoria, nearly opposite Hurlgate, immediately upon the East River, running to within twenty feet of the water, has not failed for several years, to produce an abundant bloom, without the aid of any artificial means, and at Brooklyn, and other places, have been unable to obtain a hundred flowers from the same number of plants. But, as it is impossible for most cultivators of such a situation to secure the best means must be adopted for procuring flowers, such soil and situations as those who are admirers of the dahlia, possess. This will undoubtedly be best effected by planting in the best soil and most favorable aspect the garden affords. If the soil is sandy it should be well trenched, in order that it may retain moisture a greater length of time, and allow the roots to penetrate more readily to greater depth, which will enable the plants to withstand drought. When the extent of a garden will allow of a choice of such a locality as Mr. Duhalp recommends, should at once be selected.—Ed.

the first place it conduces to health. A gentleman of my acquaintance told me, that he would ride every mile to see one really healthy woman! and I am convinced we think would be rare enough to justify effort. Now all our treatise on the preservation of health, in recommending exertion as its "sine qua non," insist also, that that exercise must be taken in open air, and that the mind must be engaged in some equally with the body. Now what occupies the mind to fulfill these conditions like gardening? Let me practice it a while out of doors, on a beautiful morning, with all the delightful excitement of going out a border, sowing seeds, transplanting and raising shrubbery, and they will find by the quickness of every pulse, and the glow of the cheek, how useful is the exercise. And as a sort of supplement to this part of my subject, I would add, that the art of gardening leads directly to early rising, and some of its most important offices must be performed before the burning heats of the day come on. "Dear me," says some young lady, "I never can get up early; if that is necessary in order to raise my garden, I never shall do it!" Never fear, my fair friend, once get your heart and soul engaged in the work, and you will rise early, because you cannot do otherwise. The images of your geraniums and roses haunt your morning pillow, and you will be down before the first dawn, to see if the blossoms they promised yesterday, have stolen forth, like beautiful maidens in the stillness of night.

Again, gardening is a graceful accomplishment for a lady, and has so been held from the time of old Eve—if we may credit the saying of a very old gentleman, one Mr. John Milton, who has so many handsome lines to that effect, and who is every body admired in times when every body writes such fine poetry as they can now-a-days. We seriously think that it is every woman's duty, as far as in her lies, to see that the outside of her dwelling is well arranged, trimmed, and ornamented, as to endeavor after bright brasses, pretty carved and handsome china, in the inside.

"What is the use of flowers?" exclaims a thrifty housekeeper, meanwhile busily polishing her fire-iron. What is the use of bright fire-irons, say we? Why? or of any fire-irons at all?—could you not have one fire on two stones, that would keep you quite warm? What's the use of handsome table cloths and spreads? one might get on a board, and sleep in a buffalo skin, and not really startle either!

"What is the use of the 'utile.'" Perhaps many of our readers will remember how involuntary was the character they have formed, in riding by houses, as if to curse their inmates. When you see a house standing all alone, bare of shrub or flower, except perhaps some volunteer bunches of thistle and pig-weed; do you infer of its inmates? And when you pass even a log cabin, where the sweet brier is carefully trained around the door, while veils of morning glories and of accler leaves, shade the windows, do you not immediately think of the dwellers as neat, cheerful and agreeable? This is more than the case in regard to the homes of the poor. The credit of the rich man's grounds may belong to the gardener, but they who can keep no gardener, whose simple flower garden springs out of momentary passion from necessity labor, possess a genuine maternal love of the beautiful, to render an humble abode so fragrant and fair.

But then the time and expense of keeping an ornamental garden!—says some one.—Good, my friend, this is a consideration—but I have used up my column of paper. Next month, however, I may show you how to find both time and money.

H. E. B. S.

WET FEET.—How often do we see people tramping about in the mud, with leather soaked through, and how often do such people when they return home, sit down by the fire-side and permit their feet to dry without changing either their stockings or shoes.—Does not wonder at the coughing and barking, the catarrhism and inflammation, which enable them to ride in their carriages? Wet feet most certainly produce affection of the throat and lungs; when such diseases have once taken place, "the basis on fire," danger is not far off; therefore, let us treat our readers, no matter how healthy, to a bath against wet feet.—*Med. Adc.*

What has no bread to spare, should never keep a

Population Statistics.

WE annex a comparative view of the Census of the United States at the several enumerations taken by order of the general government from 1800 to 1840.—The increase of population since 1830, is at least four millions. The present population of the United States is very little short of SEVENTEEN MILLIONS.

States.	1810.	1820.	1830.	1840.
Maine	151,719	229,705	298,353	389,955
N. Hamp.	153,762	241,360	344,161	509,328
Vermont	151,163	217,713	255,701	320,652
Mass.	233,215	472,010	523,257	610,108
R. Island	60,122	77,031	83,039	97,199
Conn.	251,002	292,012	375,292	507,665
N. York	356,736	639,419	1,372,512	1,919,016
New Jer.	211,019	290,553	377,753	504,821
Penn.	602,365	1,001,901	1,649,158	2,318,233
Delaware	61,274	72,674	72,749	76,718
Maryland	341,548	389,516	467,330	475,040
Virginia	880,000	1,047,022	1,605,379	2,211,105
N. Carolina	478,103	555,500	686,829	737,077
S. Carolina	315,591	311,115	302,741	301,183
Georgia	102,101	152,433	210,071	240,825
Alabama	20,815	127,001	309,529	479,140
Mississippi	8,530	40,332	153,448	136,621
Louisiana	21,019	70,536	153,467	215,730
Tennessee	105,602	201,727	422,413	614,904
Kentucky	220,453	406,511	561,317	687,917
Ohio	45,363	230,760	551,434	837,963
Indiana	14,753	115,520	147,311	345,034
Illinois	12,223	55,241	157,453	423,931
Missouri	20,439	66,546	110,115	237,731
Arkansas	4,702	8,576	31,629	111,705
Mich. Col.	14,063	21,023	33,639	39,334
Fla. Ter.			34,730	36,692
Wis. Ter.				43,393
Iowa Ter.				
Total.	5,305,925	7,239,811	9,638,134	12,866,920

§ Bradford county and parts of Union and Luzerne not included.

* Nine counties not received.

† Incomplete.

‡ Returns from the Western district not received.

§ Part of Monroe county not received.

¶ Seven counties not returned according to law, and not included in this estimate. It is supposed they have a population of about 50,000.

PROGRESS OF THE WHOLE POPULATION.

Year.	Number.	Increase.
1790.	3,929,927	
1800.	5,305,925	1,375,998 or 35.1 per cent.
1810.	7,239,811	1,933,886 " 36.3 "
1820.	9,638,134	2,398,323 " 33.1 "
1830.	12,866,920	3,228,786 " 32.5 "
1840.	16,900,543	4,033,623 " 31.1 "

By an examination of the tables it will be seen that the white population has increased in a very uniform ratio from 1790 to the present time; the increase in no decade being less than 34 per cent., nor more than 36.1 per cent. The ratio of increase among the free colored people has been very fluctuating; but taking the colored population en masse, slaves and free, the fluctuation has been moderate down to 1830, and the average ratio of increase nearly as great as among the whites. But for some reason or other, (perhaps the Abolitionists can explain,) the rate of increase for the last ten years, has been greatly reduced, both among free negroes and slaves. A few have gone to Texas and Canada, perhaps 30,000 in all, but this affords a very imperfect explanation of the phenomenon.—*Jour. Com.*

For the New Genesee Farmer.

Education of Farmers' Children.—No. 2.

Of the kind and quantity of education for the children of farmers, the following would be a just estimate.—1. It should be appropriate and pertinent; 2. practical, as far as may be; 3. extensive as their condition and means will permit; 4. moral and intellectual; and 5. clearing, not depressing, them in their rank in life.

These particulars will comprehend more perhaps than some will be ready to admit; but, it is believed, not more than is required by all above the middling class of farmers. The acquisition of it by this portion will soon exert a salutary influence on those below them. It embraces what is necessary for all, that education in the common and elementary branches of which no youth in our country should grow up ignorant; next that which is especially pertinent to the farmer, that knowledge of agricultural subjects which is placed within his power; next, instruction in various kindred objects, and those general subjects which have a connection with our most important civil and social relations, including much of natural philosophy, some chemistry, moral philosophy, the elements of

the principles of government and our constitutions and laws, and the rights and duties and privileges of citizens, and something of political economy or the knowledge of the classes of men and of production and distribution of property as well as of commerce and money.

Besides these, there are various studies, which have an indirect but powerful influence in forming the mind, and strengthening it and fitting it for thinking correctly and closely and profitably, such as algebra, geometry, languages as the Latin, botany, mineralogy, surveying, rhetoric, a portion of geology, and other things of less consequence. Those may have no direct influence upon the son or daughter in fitting them for the immediate labors of a farm, or garden, or farm house; but they exert a great influence upon the mind, to bring out its powers, and to give to it energy and activity. Several of these are important to the sons especially, and will preserve them nearer the level of the daughters, as they will keep them longer at school, will carry more of them from home a few months, and show them more of men and manners, and will place them more on their own responsibility, and tend to elevate their whole character.

It is an undoubted fact, that the daughters too often receive these advantages to a greater degree than the sons, and that the latter are depressed by the comparison. Besides, many of these extra studies are recited to both, and may be obtained by them. They will employ the sons longer, and when their minds are made more mature. But, *hark! they shall be pursued in any case, must be left to the good judgments of parents and the parties concerned.* True it is, that the sons need more special attention. They would not be so likely to be dissatisfied with their condition in life, and another end would be gained too by such a course; the daughters, expecting a settlement in the same relative condition, would have a stronger inducement to qualify themselves for those household duties, for which they will find a strong and constant call. In this respect, there is need, too, of correction of mistakes, and the practical education of the daughters should go on hand in hand with that of the sons. The latter should not alone be required to labor and toil in the appropriate works of a farmer and of a farmer's house. For these domestic duties, there needs a wise preparation. *He that by the plough would thrive, must hold other or drive,* is a plain practical truth in all places, and conditions, and business. The mistress of a family has no less occasion for its application than the farmer himself.

Finally, such an enlarged education would make the sons and daughters more suitable companions for each other, and the amount of happiness would be greatly increased. The rank, the notions, the aims, and the efforts, would be more nearly alike. They would be far more contented with that truly honorable and happy condition in which their benevolent Father has placed them. Their children will be provided for in a wiser manner, so that their "sons may be as plants grown up in their youth, and our daughters may be as corner stones polished after the similitude of a palace." D. C.

Rochester, Feb. 1841.

A DEARABLE WHITEWASH.—Before putting your lime, which should be unslacked, into the water, saturate the water with muric acid (common salt.) This will make a whitewash that will not rub off nor crack, and is very lasting.

CURE FOR TOOTH ACHE.—Mix alum and common salt in equal quantities, finely pulverized. Then wet some cotton, large enough to fill the cavity, which cover with salt and alum and apply it. We have the authority of those who have tested it, to say it will prove a perfect remedy.

To Correspondents.

We thank a *fair incoquina* for her letter, but cannot guess out the enigma it contains. We shall wait with impatience the promised answer, and can assure her the favor will be highly appreciated. We hope she will not yet lay aside her useful pen. The errors mentioned were in the copy.

WHERE IS ANNETTE? There have been quite a number of inquiries respecting her of late. Her communications have had a good effect, and we hope she will not abandon us. We have received a beautiful song, composed in her praise, and set to music. If she will only inform us of her whereabouts, we will forward it to her, or call and present it in *propria persona*.—Ed. Jr.

"Graham's Magazine," and "Godey's Lady's Book."

We are now in the regular receipt of these two elegant periodicals, and as some of our readers are lovers of fashionable literature we would recommend them to their notice. The engravings alone are worth the price of subscription. Wm. A. HERRICK is agent at Rochester.

Genesee County Agricultural Society.

We are informed by T. C. PETERS, Esq., President of the Society, that, at a meeting held Feb. 10, a list of over 200 premiums was made out for the coming season, and it was decided to hold the annual Exhibition and Fair at Alexander on Wednesday and Thursday, the 13th and 14th of October next. The list of premiums will be circulated in handbill form. C. P. TURNER, Esq., is Secretary, Batavia.

State Bounty on Silk.

The Committee of the Assembly, to whom the subject was referred, have reported a bill entitled "An act to encourage the growth and manufacture of Silk." It provides that a bounty be paid, of fifteen cents for each pound of cocoons, and fifty cents for each pound of reeled silk produced in the State. The report is an interesting one, and we will publish it next month, by which time we hope the bill will become a law.

Large Hogs.

Mr. Geo. W. Atwill, of Lima, Livingston Co., slaughtered a sow and nine pigs, the weight of which when dressed was 4,414 lbs. The pigs were less than eighteen months old. The litter consisted of ten in all; one of them was sold. They were a mixed breed, mostly Leicester and Byfield. The weight of each was as follows:—Sow, 493; Pigs, 466, 454, 370, 511, 439, 445, 397, 406, 442. Total, 4,444. Average, 444 each. Quite a lusty family of porkers!

Another.

Mr. Hendrickson, near Miamiburg, Ohio, has a hog (common breed we suppose) which weighed, in October last, 838 lbs.—about three and a half years old. He has also a fine full blooded Berkshire boar—particulars at given. Mr. Rogers, of Miamiburg also, has some thrifty pigs—part Berkshires.

Large Pigs.

Mr. Sheldon Cook, of Bergen, Genesee Co., slaughtered 7 pigs, of a cross breed, (Leicester and Berkshire,) only 7 months old, all of one litter,—which weighed, when dressed, 1,500 lbs. The largest weighed 244 lbs. They were not fed corn, excepting about the last two months. Has anybody had larger, of no greater age?

More Yet!

Mr. Samuel Lundy, of Waterloo, informs us that he slaughtered 12 spring pigs, Leicester breed; which weighed, when dressed, 3,044 lbs. The 6 oldest were 9½ months old, and weighed 1760 lbs. One of the largest weighed 308 lbs. He challenges the Berkshires to beat this. If the expense of feeding was considered, perhaps the Berkshires would appear to the best advantage; also in the quality of the pork.

"Frank."

Our thanks are due to Messrs. Kimber & Sharpless for three copies of "Frank, or Dialogues between a Father and Son, on the subject of Agriculture, Husbandry, and Rural Affairs," by James Pedder, Editor of the Farmers' Cabinet. We learn that they were forwarded last August, together with a box of the same for a bookseller of this city; but were by some oversight detained on the way. See advertisement.

ENGLISH MARKETS.

By the arrival of the Steam Ship Britannia at Boston, we have received the Mark Lane Express and other papers of the 1st of February, from our friends in London, for which they have our thanks. We observe no material change in the reports of the Markets. Business generally was said to be dull and unsteady. The best brands of United States flour continued to bring 36s per bbl. At Liverpool the demand for cotton had decreased.

NEW YORK MARKET—FEB. 22.

PROVISIONS—There is no change in Beef. Pork is rather firmer; several hundred lbs. Ohio Mess have been sold at \$2 15; and some lots of Ohio prime at \$2 75. New York State Pork is \$10 and \$2 10. Small sales of Northern Lard at 7½; City rendered is held a little higher. Butter, except that of prime quality, is very plenty; and for fair lots in rolls only 5 or 6 can be obtained. Cheese steady in price.

SEEDS—Clover is at 5½c lb., and rough Flaxseed at \$10, 25c; 100 lbs Timothy sold at \$2 25, and some afterwards at \$2 15, though this is more than can be certainly calculated on hereafter.

ASHES—The stock of pots is about 3000 barrels, and prices 2500 bris—both sorts sold at \$6 per 100 lbs, though nothing of importance was done.

CORN EXCHANGE—The sales of flour have been moderate in extent. Genesee at \$1 75, New Orleans at \$1 75, Ohio, north at \$1 75, Georgetown and Howard st. in a very small sale at \$1 75. Some shipments were made of various kinds. A mixed parcel of Jersey Corn was sold at 36c, and a quantity of rye in the same lot at 30c, 50c, 50c. These prices are considered rather low for the quality. Jersey oats sold at 30c, and Southern at 26c 25c per bu. Sales of cornmeal at \$2 75, barrel, and rye flour at \$1 25, 36 7.

CATTLE MARKET—At market 500 head of Beef Cattle, including 100 left over last week, 139 was from the South, 120 from the East, and the balance from this State; 121 milch cows, and 1150 sheep.

There was a large demand for beef, and 510 head were taken at \$2 18 25, averaging \$2 15 the 100 lbs.

MILCH COWS—Former prices were fully maintained, and 100 we taken at \$20, \$30, and \$10 each.

There were in good demand, and all taken at \$3 to \$4 for common, and \$5 to \$6 for good.

HAY—The market was well supplied, and the sales were mostly made at 62½ to 69 cts the 100 lbs.

PHILADELPHIA MARKET.

Flour for shipment to England, about 700 lbs, were obtained at \$1 50; and part of it delivered at this price. Rye Flour—Fair sales at \$4 per bu. Corn Meal—Sales of Pennsylvania Meal at 10 cts, at \$12 25 for superior cakes; for ordinary brands, the price is 10 cts. There has been a steady demand for Clover seed, and upwards of 1200 bushels have been taken at 4 75 to 5 33 per bushel.

ROCHESTER MONEY MARKET.

Species,	par.	Eastern Funds,	par.
Treasury Notes, 1 pr ct prem.		Indian,	8 a dis
Eastern Drafts, 1 do.		Illinois,	8 a dis
Pennsylvania, 6 a 10 do.		United States, 12 a	do
Ohio, 6 a 8 do.		New Jersey, par a 5	do
Michigan, 12 a 13 do.		Canada, 6 a	do
Maryland, 6 a 10 do.		Suspension Bridge, 3 a	do

Agents for the Rochester Seed Store.

A FULL assortment of seeds, put up at the Rochester Seed Store, may be found at each of the following places. Subscriptions will also be received there for the "New Genesee Farmer and Gardener's Journal."

Buffalo,	W. & G. Bryant.
Lackport,	S. H. Marks & Co.
Albion,	C. M. Swan
Brooklyn,	George Allen.
Scottsville,	Andrew & Garbat
Le Roy,	Tompkins & Morgan.
Bravins,	V. D. Verplack.
Attica,	H. A. Wood.
Warsaw,	E. R. Bascoun.
Perry,	L. R. Parsons & Son.
North Morris,	H. Sleeper.
Nunda,	W. M. Stone.
Genesee,	J. F. & G. W. Wyman.
Canandaigua,	J. R. Hayes.
York,	H. H. French.
Geneva,	A. H. Houghton.
Waterloo,	Abraham Deuel.
Palmyra,	Ray & May.
Syracuse,	T. B. Fitch & Co.
Eliza,	J. E. Warner.
Oswego,	D. Canfield.
Hamilton,	J. A. Mott.
Cooperstown,	J. H. Seligman.

Rochester Seed Store, March 1.

GRASS SEED WANTED.

A VERY HIGH price will be paid for good clean Timothy Seed, delivered to the Seed Store, BATEHAM & CROSMAN, March 1.

CLOVER SEED.

OF EXCELLENT QUALITY, for sale at the Seed Store, BATEHAM & CROSMAN, March 1.

"FIANK."

"Oft Dialogues between a Father and Son, on the subjects of Agriculture, Husbandry and Rural Affairs. This interesting and instructive volume is now for sale at 10c. State st. Rochester. The price is so low, cannot fail to convince the readers of that paper of the value of this book especially as a present for farmers' children, or young people in the country. The New York, BATEHAM & CROSMAN, March 1.

AGENCY FOR PERIODICALS.

W. M. A. HERRICK, No. 61, Buffalo st., opposite East Hotel, is Agent for Godey's Lady's Book, Graham's Gentlemen's and Lady's Magazine, Littel's Select Reviews, The New Yorker, The New World.

GOLD VINE PEAS.

RAISED in Canada by the original producer of this variety, for sale at the Seed Store, BATEHAM & CROSMAN, March 1.

MOUNT HOPE GARDEN & NURSERIES.

ST. PAUL STREET, ROCHESTER, NEW YORK.

THE Proprietors of this establishment offer for sale an extensive assortment of Fruit and Ornamental Tree Flowering Shrubs, Green House Plants, Bulbous Flowering Plants, Double Dahlias, &c. &c.

Gardeners laid out, and Gardeners furnished on reasonable notice.—Persons requiring information on any subject connected with the business, will receive a prompt reply.

All orders, letters of inquiry, &c. must be addressed (post paid) directly to the proprietors.

Trees, Plants, &c., will be carefully packed, so that they may be carried to any part of the country in safety; and packages will be marked and shipped as may be designated in the order.

Persons with whom the proprietors are unacquainted, are requested to give a satisfactory reference, or name some person in the city of Rochester, who will guarantee the payment.

ELLWANGER & BAIRY, Rochester, Dec. 1, 1840.

TIMOTHY SEED WANTED, At the Rochester Seed Store.

ROCHESTER PRICES CURRENT.

CORRECTED FOR

THE NEW GENESEE FARMER, MAR. 1, 1841.

WHEAT,	per bushel,	\$ 81 a	41
CORN,	"	37 1/2	41
OATS,	"	22	25
BARLEY,	"	31	25
RYE,	"	50	25
BEANS, White,	"	62 1/2	75
POTATOES,	"	19	22
APPLES, Desert,	"	31	31
" Common,	"	25	31
" Dried,	"	75	88
CIDER,	per barrel,	100	150
FLOUR, Superfine,	"	4 25	25
" Fine,	"	3 50	3 75
SALT,	"	2 00	2 00
PORK, Mess,	"	10 00	11 00
" Prime,	"	9 00	9 00
" Hog,	per 100 lbs,	3 75	4 00
BEEF,	"	3 50	4 00
POULTRY,	per pound,	6	7
EGGS,	per dozen,	16	18
BUTTER, Fresh,	per pound 14	16	16
" Firkin,	"	10	12 1/2
CHEESE,	"	6	7
LARD,	"	7	8
TALLOW, Clear,	"	8	9
HIDES,	"	5	5
SHEEP SKINS,	each,	75	87 1/2
PEARL ASHES,	per 100 lbs,	5 00	5 00
HAY,	"	4 50	5 00
WOOL,	per pound,	35	40
GRAIN,	per ton,	7 00	8 00
GRASS SEED,	per bushel,	1 50	2 00
CLOVER,	"	6 00	7 00
FLAX,	"	75	75
PLASTER, (in bbls) per ton,	"	6 00	6 50
" bulk at Wheeland,	"	3 50	3 50

Remarks.—We make but few alterations in our table this month. Business generally is dull—the roads are bad, and very little produce is brought into market. The price of wheat has advanced a trifle, but the quantity brought in is small. The Millers generally are not yet prepared to purchase for spring business. A little pork still comes in and sells mostly at four dollars. Hatter, eggs, poultry, &c., are in small demand—supplies moderate.

Clover seed has been brought in liberally from Pennsylvania and Ohio, and the price has declined a trifle. It will probably advance, as sowing time advances. Timothy seed is scarce, and price high at present.

THE NEW ENGLISH FARMER

AND GARDENER'S JOURNAL

BATEHAM, CROSMAN, Proprietors. } VOL. 2. ROCHESTER, APRIL, 1841. NO. 1. } JOHN J. THOMAS, M. B. BATEHAM, Editors.

PUBLISHED MONTHLY.

TERMS.
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 Masters, Agents, and others, sending money free of post, will receive seven copies for \$3.—Twelve copies for postage-free copies for \$10.
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 50 cents.
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Publishers' Notices.

AGENTS AND SUBSCRIBERS.—An Explanation.—The number of letters received daily at the Farmer office is very great, sometimes from 50 to 100) and the health of the acting publisher will not at present allow him to give close attention to all; so that letters are not usually read by the publisher himself unless they contain something of more than ordinary importance. This will explain many cases of apparent neglect—especially such as omitting to send extra copies to agents entitled to them, but who have not asked for them. It will also explain why letters of acknowledgment are not more generally been sent.

The clerks in the office are competent and careful, but they are not infallible, nor do they know every thing. Some mistakes are made, but many complaints arise from the negligence of the persons ordering the papers, in not mentioning that State the Post Office is in. There may be a dozen offices with the same name in the United States, and if the letter is not marked, it is no wonder if the papers are sent wrong.

A few cases have come to our knowledge where the letters are evidently mis-carried or been purloined from the mails, and the money lost. In such cases we consent to hear the sender, after being satisfied that the money was correctly mailed, and when informed of the particulars, we forward the money.

Distressing Times!

It is too bad—we cannot endure it. What shall we do; we daily receive a greater or less amount of money, on which we have to sacrifice from 10 to 15 cents on a dollar, in the count, and some bills we have to return to those who send them. We presume our friends send us such money as they can spare to be good, and therefore we do not ensure them; we wish to call their attention to the table below, and to inform them that if there is discount on the money, we can-

not afford to send the Farmer at the wholesale terms, (allowing a commission) and if the discount is more than ten per cent, we must return the money. (Several of the "Red back" banks in Western New York have stopped payment of late, and their bills are unsaleable at present.) The following are the present rates of the principal kinds of bills.

Spain, par.	New England, par.
Pennsylvania, . . . 6 a 10 dis.	Maryland & Virginia, 6 a 10 dis
U. S. Bank, 20 "	New Jersey, 3 a 6 "
Ohio, 10 a 15 "	Indiana, 10 "
Canada, 5 "	Illinois, 15 a 20 "
Suspension Bridge, 3 a 5 "	Michigan, 25 "

The bills of all the Safety Fund Banks are received in deposit by the Banks of this city; and all the Free Banks are also received at the Rochester City Bank, except the following:

All the 9 Banks at Buffalo—Bank of Western New York—City Trust—Chelsea—Fifth Ward—Sutton Island—Farmers'—Seneca—One—Mills'—Chloro—Tonawanda—Lodi—Lowville—Olean—Silver Creek—Albany—Binghamton—Watertown—Cattaraugus—St. Lawrence—Exchange Bank of Genesee at Alexander—Farmers' & Mechanics' at Buffalo—James Bank—Demsville—Farmers' Bank of Orleans at Gaines—Delaware—Mechanics' & Farmers' at Cicau—Washington.

Several of the above Banks are no doubt perfectly solvent and will soon be again current.—Rochester Daily Ad.

To Readers and Correspondents.

We are gratified by being able to give the names in full of several new and valuable writers this month. Other communications are received, some of which will appear next month; but several, without proper signatures, we must decline publishing.

THE MONROE COUNTY AGRICULTURAL SOCIETY, it should be remembered, meet on the 5th day of May, to make arrangements for the season.

Hints for the Month.

Clover and grass seed, if not already sown, should now be, as soon as possible, that they may receive the full benefit of a moist soil, and a crumbling surface from freezing and thawing, to assist vegetation. When sown upon wheat, a light harrowing more effectually insures their growth, and benefits rather than injures the wheat. Be sure to put on plenty of seed—a few chillings more per acre in seed will often bring many dollars more per acre in crop. Sinclair gives the case of a farmer who always stocked heavy with grass seeds, and who always as a consequence secured a heavy coat of herbage the first year, which differed from old pasture only in being more luxuriant.

The farmer should also remember the advantage of a mixture of grass seeds,—different species subsisting upon different parts of the soil—and that a given surface of the soil will therefore support a much greater number of plants of different, than of one and the same species.

New meadows should be early and carefully picked of all loose or projecting stones, and the surface rolled smooth. By clearing off stones and filling covered ditches or building walls, the farmer kills at least three birds with one stone,—he enables the mowman to cut more closely and thus save a larger crop of hay; he prevents the frequent loss of hours in the thickets of haying from the dulling of scythes; and, by the use of permanent fences are constructed, useful drains.

Plaster should be sown early, as soon as the grass and clover starts a little—a bushel and a half, or thereabouts, to the acre, is as well as three times that quantity.

Spring wheat should be sown as early as practicable. If the soil be dry, it is best, like peas, if covered by means of a light plough. Where wheat has been winter-killed, it may be advantageous to sow those recent spots with spring wheat.

Let all the manure which has been collecting during winter be carted out on the land. To leave a large heap unapplied is throwing away money by handfuls—a single load will often produce several bushels increase of crop—an enormous waste results from neglect. But where manure is not now applied, let it be made into compost, by mixing soil, or what is far better, swamp muck and peat, with it. One load of stable manure, and three of peat, mixed together, with a small addition of lime, will make four loads of compost, fully equal in effect, and far superior in applying and mixing with the soil, to four loads of stable manure. "Manure is money"—let it not be wasted.

Let all spring crops be put in, in the best manner;—"a good beginning makes a good end,"—most commonly. Plough well—let furrow slices be narrow—(except sward)—furrows six inches wide, will show a much handsomer looking field after ploughing, than those a foot wide. Try it. Thorough work is cheap.

Sleds, now out of use, should be well taken care of, put under shelter, and raised from the ground. Sleds, cast wheels, &c. are often more injured by standing on damp earth, by which decay soon commences, than all the use, and (other) abuse, that they receive.

Transplanting trees must be done now, or very soon,—or else put off another year. Farmers! have you fruit trees enough?—recollect they cost but little—and produce much.—Have you ornamental trees enough round your house?—they are easily planted—cost but a trifle—and make home delightful—rendering what is invaluable, still more invaluable—now is the time.

To Gardeners.

Our readers will perceive by a notice in another page, that a HORTICULTURAL SOCIETY is about being organized, and as an exhibition of Fruit, Flowers and Vegetables, will be held some time during the summer or fall, it would be well for gardeners and amateurs to make early preparations. Our June No. will contain the constitution of the Society and notice of whatever arrangements may be made with regard to exhibitions.

New Silk Reel—Cocoons.

Mr. Joseph Allyn of this city, has invented a machine for reeling and spinning silk which it is thought will prove superior to any now in use. It is not quite perfect, but the public will soon have an opportunity of judging of its merits. A more particular account of it may be expected next month.

Mr. Hiram Robbins, near Allen's Creek, in the town of Brighton, offers to take a few bushels of cocoons and manufacture them into sewing silk on equal shares, (halves.) We have seen sewing silk manufactured by him, and it was of excellent quality.

Every individual in the land, shares the benefits of fuel for domestic purposes; and no subject can be proposed for our examination in which a greater number of our readers are interested.

Although *fossil coal* may now be obtained both from the east and from the west—upward from Albany or downward through the Chemung canal; and though *peat*, apparently of an excellent quality, has been found in some of the adjoining counties; yet farmers will probably for a long time to come, draw their supplies of fuel from their own woods. We shall therefore confine our remarks for the present to this branch of domestic economy.

The difference in value between some kinds of wood is very great. In this district, sugar maple and upland hickory, are considered the best; and willow, and Lombardy poplar, perhaps the worst.

But why is not a cord of Lombardy poplar equal to a cord of maple? Chiefly because it does not contain as much carbon. We do not say it would not make as many bushels of charcoal—it would probably yield more. The deficiency is not in the bulk but in the weight. Its texture is more porous—there is really less of it. A cord of maple has been estimated in the *Genesee Farmer* to produce 25 bushels of charcoal, while a cord of basswood or white pine yields 32 bushels; but then the former will weigh 25 pounds a bushel, while the latter only weighs 15 pounds.

The relative values of fire-wood, have been stated by the same writer in a table, which we shall expand and render plain to the comprehension of all of our readers, as it may be useful in assisting purchasers.

Where a cord of *hard maple* is worth 100 cents, *white beech* and *yellow birch*, are worth 80 cents—*white ash* and *white oak*, 75 cents—*sugar maple*, *white elm*, and *swamp ash*, 65 cents—*chestnut* and *butternut*, 52 cents—*basswood*, *whiteoak*, and *white pine*, 45 cents.

It should be understood however, that in comparing the different kinds of wood, it ought in all cases to be dry. Some sorts contain much more sap than others; and if we undertake to burn them green, a larger part of the heat will be occupied in carrying off the moisture in some than in others; for all the heat that is required to turn the sap into steam, is lost to us. As an illustration—we should prefer *white ash* to either *sugar maple* or *white beech*, if we must burn them without drying; and the smoldering fires of *white oak*, *white elm*, and *swamp ash*, we should rather not approach.

But another view may be taken of the comparative values of fire-wood. It will not be far from the truth, if we estimate one cord that is well seasoned, equal to two cords of green. Here then by laying in a stock one year before hand, we gain about one hundred per cent.—a speculation certainly worth the attention of every house-keeper.

To leave wood corded up in the woods, however, is a poor plan. A few outside sticks when split fine to let out moisture, may dry enough to be much improved; but the interior of the pile, especially if it be in a shady place, will retain so much of the sap as to become sour—a most unfavorable state for fuel. We prefer green wood fresh from the stump.

But though wood which stands corded in the open ground, receiving the benefit of the sun and wind, may dry enough not to turn sour, it may still be in poor condition to burn at the commencement of winter. Every heavy rain has soaked it, often for days together; and its state will be very different from wood that stands free from the ground under a

dry shed. More than 25 per cent. of moisture will be retained, which is a heavy drawback from its value.

The difference in the quantities of heat received from the same kind of wood in different conditions, is so palpable where a stove is used, that a person of good observation might satisfy himself without a thermometer; and we believe the following *scale*, beginning with that in the worst condition, will be found nearly correct:—

1. Wet and partly decayed, or water-soaked.
2. Soured by a fermentation of the sap.
3. Remaining corded up in shady places.
4. Corded up in the open ground.
5. Partially decayed in seasoning.
6. Sheltered for 9 months or a year by a good roof.
7. Seasoned several years in a dry building.
8. Kiln-dried.

Whoever will carefully make experiments on fire-wood in all these conditions, must become satisfied that great improvements may be introduced into this branch of domestic economy.

For the New Genesee Farmer.

“Bots and Horse Bees.”

Messrs. EDITORS—Some other facts on this subject may be added to those mentioned by “Spectator” in your last paper. It is not easy to decide in what manner the *nits*, deposited by the *bot fly* on the hair of the horse, pass into the stomach of that noble animal. The fact is certain. By the shaggy coat of the stomach the *nits* are detained by some unknown contrivance till they hatch into *bots*. By the same contrivance probably the *bots* are detained till they are full grown, deriving their nourishment from the coats of the stomach. In the course of the following winter and spring, many of them are *roided* by the horse, and may be seen in the manure of the horse stable, half an inch long, sharper at one end which is their mouth, showing many rings, and giving signs of life on being touched, probably to be changed by the heat of summer into *bottles*. But many of the *bots* are often retained for a longer period in the horse’s stomach, before they are voided by the animal. It is in this case that the *bots* are so dangerous, and often destroy the horse, as they pass their tapering mouth or proboscis through the shaggy and into the other coats of the stomach, and even through all the coats. I once saw in the stomach of a fine horse that had died from their action, multitudes of *bots* sticking into the coats, and many of them had pierced through that organ, so that on scraping them off with a knife the liquid matter of the stomach passed through its coats. Those *bots* were large and strong and of a deep flesh color. They might have been detached perhaps by the action of spirits of turpentine, for this substance has great power over all such animals, but the death of the horse must have ensued from the numerous lacerations of the stomach. The only way to prevent the fatal termination, is the application of remedies before the *bots* have got so deep a hold, and of course before there is any indication, or any alarming symptoms of the disease. In other words, the remedy must be applied while the horse is in good health. This will not commonly or very often be done; and if it should be done, it might not prove effectual. We can know the danger only by the symptoms of the disease, the indications of the danger.

The name given to the *bot-fly* by naturalists has been *Oestrus*, from the Greek to excite or to sting. Hence they called the *gad-fly* or *gad-fly*, which lays its eggs in the backs of cattle, *Oestrus bovis*, or ox-fly; the insect that lays its eggs in the nose of sheep, *Oestrus ovis*, or sheep-stinger; the *bot-fly*, *Oestrus equi*, or horse stinger. The last, because it inhabits the stomach of the horse, is now called *Gasterophilus*

equi, the lacerator of the stomach of the horse. A remedy discoverable in the works of nature, I believe that the *bot* performs some important service to the stomach of the horse, while its own being opened and it is preparing to become a fly. Probably it is only in a diseased state of the stomach they cease to be useful and become injurious to the stomach. It may be that some disease of the stomach first brings on the diseased state of the horse, very certain that the larvae of the sheep-someworm become diseased in the nose of the sheep, and way upwards towards the brain, and bring sickness, and dullness, and loss of appetite, and, at last, and finally the death of the sheep. The position of the head shows them to be large, and full of maggots.

It is well known that the transformations of insects are different and take place under different circumstances. The silk-worm winds up itself in a cocoon to a chrysalis, and thence a fine moth. The cotton-wool-worm winds up itself by its web and and thus undergoes like changes; thus also mites. The worm on the milk-weed attaches its tail to the underside of a rail or limb of a dog and flies off its head, and becomes a beautiful, spangled with spots of gold, from which in a few days a splendid butterfly comes forth. The large worm on the common cabbage descends to the soil after its period of eating, drops off its head, and continued working forces its way into the earth, where it enters residence, and the next spring works its surface, and comes forth in July or August on a moth that trouble our candles in the evening to no extent. The earth too, becomes the habit of the *bots*, till the natural changes take place, and flies spring into life to take their common annoyance to horses and enjoyment to their riders. This annoyance is greatly increased by the fertilization of the *nits* takes place after their position on the hair of the horse.

How wonderful are these contrivances and means for the diffusion of life! What a multitude these wonders present themselves to the eye of the careful and patient observer!

C. DEW

March 1841.

For the New Genesee Farmer.

Rust on Wheat.

(Concluded from page 32.)

There is a great diversity of opinion upon this subject, and it seems almost impossible to reconcile discordant views of those who have written upon it. In an article, on rust, over the signature of List, copied into the New Genesee Farmer, page 100; from the Farmers’ Cabinet, are the following passages:—“It is stated that the fungus is a siltical plant like the mistletoe, but this is not the fact; the fungus has no power to attach itself, or penetrate the healthy stalks of the wheat.” The foundation of the rust of the fungus, is the putrefying matter discharged from the ruptured sap vessels of the plant.”

Before settling upon any definite conclusion, of the state of the stalks at the time the seeds of the fungus are deposited, it may be well to notice a few relative to this subject. The past season I had a plot of Italian Spring wheat, containing two acres, we joined a piece of winter wheat a distance of one rod. The winter wheat was badly injured by rust the whole distance, and at the time of harvest, the spring wheat adjacent, was found to be considerably rusted. Some 10 or 15 days after, the winter wheat was cut, and was affected as follows: swarthy, badly rusted, perhaps 7-8ths shrunk; swarthy, a little less; and so on to the 8th, when

and the grain was plump. The reason of the piece was not noted in the least. There was nothing in the soil or quality of the land where the grain grew, different from the rest of the farm. A few rods from the dividing line between spring and winter wheat, and in the latter, it was found that the wheat was a bunch of containing some 30 or 40 stalks.) *stems upright and grain plump.* It attracted my attention when I discovered a pile of excrement that had been dropped by a horse, lying at the roots of the wheat. Two similar cases were noticed the year before.

Two years since my father hauled a number of chip manure on his wheat field, in the fall of 1867, leaving it in piles of two or three bushels. Through negligence it was left without being covered. This field of wheat, particularly in that part where the chip manure was hauled, was very injured by rust except around those piles. *Here the wheat was bright and the grain handsome.*

Now notice the first passage quoted above, the reason of which is, that the fungus is not a parasitic and the reason assigned for this belief is, that it has no power to attach itself to, or penetrate the stalks of the wheat." It is evident in the case of the spring wheat, that the spores of the fungus are blown by the wind, (remember it lay distant from the winter wheat,) and became attached to the stalks (whether healthy or not I cannot say) of the spring wheat, and thus produced the effect described. It is probable that the wheat must be in a certain stage of its maturity, or rather its approach to maturity; and it is also probable that much depends on the state of the weather, to cause the action of the fungus. There could have been no other principle to cause the rust in the eight cases, that was not common or co-existent with the rust of the piece. The conclusion is, that the rust or fungus spread from the winter wheat, and could its action have taken place sufficiently fast, it would have spread throughout the whole piece. But the wheat was advancing toward maturity, and by the time the rust had reached the distance it did, the wheat had become more hardened, and the weather was unfavorable, its ravages were checked. And we can account, in a measure, for the escape of the wheat from the rust, in the case of the excrement by the horse, and around the chip manure. The roots of the wheat were protected from the action of the frost, and the nourishment received from the manure, aided it sufficiently to escape the rust.

After leaving this part of the subject, I will notice a few more facts relative to it. *Wheat under shade almost invariably escapes the rust.* In this case the ground is more compact, and is not acted on by the frost so as to injure the wheat; and again, the wheat, if much shaded, is retarded in its growth, and does not become enough advanced to become inoculated with the disease. I had a field of wheat the past season which on one side, was shaded by a row of trees, and a distance of 40 rods. At the time of harvesting, this side of the field was much injured by the rust, this side of the field was not at all affected by it. It was left standing, and some time afterwards I examined it; it had ripened from the rust. The other fact mentioned, and which has been noticed by almost every farmer. The wide land of a field of wheat, which has been trampled or trodden down by turning the team while plowing and harrowing, generally escapes the rust. The reason is obvious: the wheat is not so much acted on by the frost, consequently ripens sooner.

As it regards the second passage quoted above, to the foundation of the rust or fungus

is the putrefying matter discharged from the "reptiled" sap vessels of the plant," I shall say but little. The peculiar manner in which the spring wheat was affected by the rust, (in the case given above,) conclusively settles the question. Else why was not the whole piece rusted? Or why should it have gradually decreased until it disappeared with the 8th sowing? "Then, if the disease is contagious, there must be a beginning?" Certainly. But where do the spores of all fungi originate? "The leaf and stalk of the wheat, then, must be in a certain state or situation to ensure the growth of the fungus?" This is the grand question. Wheat most likely to be affected by the rust, is that which has been injured by the frost, during the winter and spring and kept backed until the weather becomes warm, when it grows too rapidly, becomes rank and succulent; it advances in this state until it has eared out and in the blossom; rendered still more tender and moist by the damp, warm weather; the pores swelled to excess, occasioned by the luxuriant flow of sap. It is in this situation, when the seeds of the fungus come in contact with it. They find the right place for their propagation—the fungus soon comes to maturity, the spores fly from stalk to stalk, perhaps carried by the wind some distance; it spreads like wild-fire. J. B. BOWEN.

Aurora, 1-11.

Making Hay.

The old proverb says, "Make hay when the sun shines;" but there is something else besides sunshine necessary to make good hay. The grass must be cut when it is mature, or the animals that have to eat it will have a hard bargain.

Many people, including some good farmers, judge of the quality of common hay by its greenness and brightness. It is a fallacious test. We have been feeding out, for a week or two, (3 mo. 8,) hay that was as bright as any body could desire, well made without rain, and kept in the barn. It was a mixture of red-top and Timothy, cut about mid-summer on account of clearing the enclosure for the cattle; and which had been left to stand one month longer, would have made excellent hay. As it was, the cattle ate reluctantly, and evidently with some loss of flesh. It is now a pleasure to see with what eagerness they take hold of hay that was cut afterwards.

There is a great difference between the NATURAL and ARTIFICIAL GRASSES. The former, including red-top and Timothy, yield their nutriment principally from the stem; and like the Sugar Cane and other plants of the same NATURAL ORDER, should be suffered to stand till the stems are mature. On the contrary, the leaves of the ARTIFICIAL GRASSES, including the clovers and lucern, are the most valuable parts; and for this reason, these kinds should be cut when the leaves are in the most perfect state.

For the New Genesee Farmer

Agricultural Experiments--their Dependence on Climate and Soil.

MESSRS. EDITORS.—It strikes me as very important, that every correspondent who states the result of his rural experiments, should give the name of the State and county in which he lives, in order that the effect of soil and climate may be taken into the account.

A farmer in Pennsylvania, without giving his longitude, comes out decidedly hostile to Timothy hay, giving clover the preference. Eastern Pennsylvania is too warm and dry to be a first rate hay country; hence the long top root of clover penetrating into the moist subsoil, is thus enabled to yield well, when Timothy is dried up. Not so in the elevated mountain region of north western Pennsylvania. There clover grows rank, and its stalk is ligneous and almost worthless, while Timothy attains a perfect growth.

Once, at Germantown, Pa., saw Indian corn raised broadcast for fodder. The same is done in the Island of Cuba and other equatorial countries, too warm and dry for grass.

Of late several clover machines have been ordered from the place to Aldam, where it is said clover drives well, while Timothy can hardly be made to live.

There is very little doubt but that in Madison and the South part of Oneida counties, in this State, a much larger crop of potatoes can be raised for a succession of seasons, than in what is called the Genesee country, from the fact that this region is higher, cooler, and less subject to summer droughts. But on the other hand we are, with like a tenton, much more certain of a crop of corn, and our clover hay is better, from the very fact that our climate is warmer and drier.

SENeca.

Peck's Pleasant (Apple.)

Some years ago, we received grafts under this name from Rhode Island; and though one branch has borne several crops, we hardly became acquainted with it before this winter, except to observe that it was generally fair and free from thrips (a Lichen?) which damages so many sorts of apples in our humid season.

It is above the middle size, heavier on one side setting the stem rather obliquely, somewhat flattened, broadest at the base, 3 inches in diameter, 2 1/2 deep. — Eye closed in a shallow depression. Stem three quarters of an inch long, inserted in a wide and deep cavity. Skin greenish when first gathered, changing as it ripens to a delicate pale yellow, except on the side next the sun, where it is tinged with pale red. — Flesh yellowish white, firm though tender, sub-acid, delicate.

A dessert apple, keeping through the winter. 3 mo. 10. It is now in fine condition.

Its principal defect when it grows on crowded branches in the shade, is a deficiency of flavor; but where it is of good size — has been fully exposed to the sun, and acquired a fine blush, — it is a very superior fruit.

We have seen no notice of this apple except in Prince's Catalogue and in Kenrick's New American Orchardist, where a meagre description occurs. It is given on the authority of Stephen H. Smith of Rhode Island: "One of the most saleable apples in market — skin smooth — yellow in the shade — a blush next the sun — flavor pleasant and good — an excellent dessert fruit. — Nov. Feb." We abbreviate the language, not having the book at hand, but endeavor to preserve the substance.

¶ A few words in regard to describing fruit: In theory, the only (or blossom) is considered the upper end because it is more remote from the root, although it may hang below; and hence the Eye of an apple is described as being in a depression (a sinking in) while the Stem or Stalk is said to be in a cavity (a hollow below.)

Sore Throat in Swine.

MESSRS. EDITORS:—Turn animals so affected, into a pasture where there is fresh feed and ground to root. It is a disease resulting generally from confinement. Pounded Charcoal mixed with food, where pasture cannot be had, or room for exercise, is one of the best preventives of diseases in swine. J. M.

Discovery of the Effect of Plaster on Land.

Professor Leibig, of Giessen, has discovered that snow and rain water always contain ammonia; hence its presence in the atmosphere. Plaster, (sulphate of lime,) forms this ammonia in the soil, and keeps it there to stimulate and feed vegetation, in the same manner as lime prevents the escape of the humic acid and other fertilizing gases, from animal and vegetable manures.

SENeca.

Important Discovery—How to render Wood Insuperable and Incombustible.

Messrs. Editors:—A discovery of the highest importance appears to have been made in France, by which the long-sought preservation of wood from ordinary decay, combustion, &c., is finally achieved.—This has been done by introducing into the wood itself, through the agency of vegetable life, the substances which contribute to these important ends.

It has, indeed, been long known to amateur Botanists, that the flowers of house plants, &c., may be colored by the introduction of coloring matter into the organization of the plants; and that the flavors of fruits may sometimes be injured or destroyed by liquids poured upon the ground, at the root of the tree, at the season of their ripening, which are subsequently imbibed into the vegetable circulation. But these isolated facts have hitherto remained with their possessors, without any useful suggestions having been drawn from them, like a multitude of other scientific truths, which only require to be applied to the arts, to produce the most important results of usefulness to mankind.

The announcement of this discovery comes to us under circumstances which leave little doubt of its truth. The discoverer having submitted his results to the Academy of Sciences, of Paris, a commission was named from that highly scientific body, to investigate the subject, and make a report thereon. In the hope of usefulness, I have made a translation of this report, (omitting some portions, as irrelevant to my purpose,) for your paper, which I subjoin; deeming it highly important that experiments should be extensively made the ensuing summer, in conformity with the discoverer's process as shown in the report. It would be no trifling result to secure timber, in all situations from decay, and our buildings from conflagration, at a cost so trifling as to be within the reach of all.

A physician of Bourdeaux, Mons. Boucherie, has arrived at the all-important result of rendering the tissue of wood almost entirely unattackable by those causes of destruction to which it is ordinarily subject; and at the same time his processes render it much more suitable to the various purposes to which it is applicable in the arts.

A commission of the Academy of Sciences, at Paris, having been named, to examine the subject, Mons. Dumas, in the name of the commission, made in December last, the following report as the result of its investigations:

"The Academy has charged Messrs. Arago, de Moiré, Poncelet, Gambley, Adouin, Boussemault, and myself, with the examination of the Memoir of Mons. Boucherie, relative to the preservation of wood, the following is the result of our labors:

"The Academy has already examined, with the most lively interest, the preparations of the author; and it has before it at this moment, pieces of these so remarkable that the task of its commission is thereby greatly abridged. Mons. Boucherie proposes to render wood much more durable, to preserve its integrity, to prevent the variations in volume which it experiences through the agencies of dry and humid atmospheres, to diminish its combustibility, to augment its tenacity and its hardness; and, finally, to communicate to it various and durable colors and odors.

"To assume that all these exigencies have been satisfied, and that this has been accomplished by methods, cheap, simple and new; and communicated through the agency of substances that are common, and which bear but a low price, is to fix the attention of the Academy, in a few words, upon the important features of the subject we are charged to examine.

"For the purpose of penetrating an entire tree with preservative, coloring, or other matter, the author has recourse to no mechanical, costly or complicated means: he finds all the force of which he has need, in that process, wherein the tree itself—the same force by which its own sap is elevated and distributed through its various parts. This, alone, suffices to convey from the base of the trunk to the very leaves, all the liquids

which he wishes to introduce, provided that these are maintained within certain limits of chemical concentration. If a tree be felled, while in full sap and leaf, and the base of the trunk be at once plunged in a vat or reservoir containing the liquid which it is desired the timber shall imbibe, that liquid, in the space of a few days, will ascend to the very leaves, and penetrate every part of the vegetable tissue, except the heart of the tree, which, in some instances of great age and hardness, or imperfect vitality, resists the absorption, and is not penetrated.

"It is not entirely necessary that the tree shall remain all its branches and leaves during this process, although it is important that those of the extreme top should remain unimpaired.

"It is not important that the tree shall remain standing during the operation, which would not always be convenient; it may be felled, and its butt submerged in the liquid it is destined to absorb, when this will find its way to every part.

"On the other hand, the tree may be treated standing, if this be preferred; for it is only necessary that cavities be cut near the bottom, or the trunk be partially severed by a saw, and that the parts thus prepared be put in contact with the liquid, to ensure the desired result.

"This species of penetration, or absorption, which is effected in a few days, without either difficulty or labor, is, as will be readily seen, wholly different from any means hitherto employed. Previous methods are well known to consist of forcing the ingredients into the pores of the wood, by powerful pressure, or of introducing them by the prolonged and imperfect action of liquids prepared at much cost, in huge vats, in which the timber is kept submerged.

"The new and ingenious process of Mons. Boucherie has placed at the command of industry an immense natural force which enables it, without cost, to conduct into the most delicate vegetable tissues all soluble substances which it may be desirable to deposit there.

"If the author has resolved, in a simple and ready manner, the great problem which he at first proposed, he has not manifested less sagacity in his choice of the substances which he has adopted for fulfilling all the indications announced above.

"To augment the duration and hardness of wood, and to oppose its decay, either dry or humid, the crude pyroligneous acid of iron is to be introduced into its tissue. This substance is wisely chosen, because crude pyroligneous acid is produced in all the forests, in the process of manufacturing charcoal; and it is easy to convert this into the pyroligneous acid of iron, by simply purging it, even when cold, in contact with scraps of old iron; and because, also, that the liquid, thus prepared, contains much creosote, which independently of the salt of iron, itself possesses the property of hardening, and of guarding against the attacks of decomposition, as well as the destruction caused by insects, in wood and timber employed in constructions and for other purposes.

"Authentic experiments tried in the cellars of Bourdeaux, upon hoops, prepared by the author, have proved, in the most conclusive manner, the prolonged duration of wood, after subjection to his process.—The ordinary hoops fell to powder, upon the least application of force to them, while those of the same age, which had been subjected to his preparation, were as solid as upon the first day they were placed there.

"If he wishes to preserve the elasticity of wood, and to render it less compressible, the author has found in the employment of chlorine with an arduous base, the means of accomplishing these ends. Ever preoccupied with the thought that his discoveries, to be most serviceable, must receive universal practical application, the author has not contented himself with the employment of the chloride of calcium, notwithstanding its great cheapness, but he has analyzed the sea water from the pits of the salt works, which is without value, and by so doing has obtained therefrom all the qualities necessary to his purpose. The different woods prepared by his saline solutions preserve their flexibility, even after several years exposure to the air; and thin sheets of this wood were twisted into spirals, first in one direction and then in the contrary one, without their suffering the slightest fracture or injury of any kind. Exposed to the air these thin pieces were neither split or otherwise injured however dry they became; and, finally, they were so far incombustible as to be incapable of sustaining or propagating conflagration.

"To these highly useful properties, which the constructors of ships, bridges, dwellings, &c., will readily appreciate, and turn to profit, the author has joined

others, less important, certainly, but still new and not without interest, in the arts. The colors we clouds so varied and casual as to promise much by the employment of his method in ornamenting most ordinary woods, so as to fit them for the fashion of furniture, and for other purposes of ornament.

"The specimens of this kind, now before the Academy, relieve us from all details upon this head; therefore suffices for us to say:

"That the pyroligneous acid of iron, alone, gives beautiful brown tints.

"That by causing tannin to be absorbed by the after the pyroligneous acid, the mass of the rendered black, while some portions exhibit tints of blue, black and gray;

"That by introducing, first, the pyroligneous acid and afterwards the prussiate of Potassa, a fine Prussian blue is produced;

"That by introducing, successively, the acetate of lead and the chromate of potassa, a lemon, or citrine of lead color is produced;

"That by introducing into the same trunk, the pyroligneous acid of iron, prussiate, and acetate of lead, chromate of potassa, the whole wood assumes a mass of clouds of blue, green, yellow and brown, which collectively produce the most varied and pleasing effect.

"The colors and shades may be varied almost at will, according to taste or fancy; as chemists sufficiently rich, in agents of this nature, to satisfy wants, and even the caprices, of the most fastidious.

"We have said nothing here, of the communication of odors to woods, by impregnations of this kind, because this is an application easily comprehended without explanation; and also because it is too strictly limited to the demands of luxury to be placed in same scale of importance with the valuable results which we have above enumerated.

"It is evident, from the bare announcement of these results, that they have not been, and never will be, the result of accidental discovery. The author reduced them from simple ideas; and they are the fruit of long continued and laborious studies and experiments."

The commission closed their labors with a recommendation that a copy of their report be transmitted to the ministers of agriculture and commerce, of the public works and the marine, of finances and of war, and that the recommendation was adopted by the Academy.

At a subsequent sitting of the Academy, that had received notice from the ministers of war and of finance, that they had recommended the method of D Boucherie to the special attention of the commissioners of engineers, the artillery, and the woods and forests. This shows the importance that is attached to the discovery, by public functionaries, and by the first scientific men of this, or any age, residing upon the sphere where its results have been witnessed and investigated.

R. W. HASKINS.

Buffalo, March 22, 1841.

Joint Interest of the North and South in the inter-State Trade.

All classes at the North taxed for Revenue—not so at the South. Tobacco Planters beginning to understand their interests. The end of State Stocks as a remittance to pay foreign debts.

Messrs. Editors.—The Cotton Planters of the South export more, and consume less, of their own productions, than the farmers and manufacturers of the North. Hence our maritime commerce receives its greatest stimulus from the South. Northern ships carry both ways all that is raised of agricultural staples, and all that is consumed of manufactures at the South; and as Pennsylvania, New York, and New England, are more legitimately the workshops for the South, than all the rest of the world, we can easily see of how great importance the South is to the North, and vice versa.

But the South very much overrates her importance to the Union, when she asserts that because she pays a large portion of our foreign debt with her cotton, she ought on that account to receive her wines and silks without import.

ascertained that there is not a sufficient impost on foreign importations, to support the Federal Union. But if it was double the amount it now is, would ask what proportion of this revenue would be paid by the cotton planter? Yes his black *Liberator*, who receives his yearly suit of tag lock cloth, and eats his peck of corn to consume any article that pays a duty to government. I believe there is a single manufacturing town in New England, which, if silks were taxed, would pay more of the duty on that article, than half the planters in South Carolina. At the South, they only consume those articles which pay an impost. At the North, and in all the free States, the whole mass of the people, the poor as well as the rich, contribute in this way to the support of government. But in the cotton growing States, the great mass of the population, are of no more political account, save in the representation they give to their masters, than the horses and cattle of the

have shown, in a former article, that all the silks shipped from the United States to France in a year, did not pay for the silks imported from France in the same year. Is it not therefore a wise policy to encourage the culture and manufacture of silks in our own country, by a moderate impost on the imported article. Would not the South be much more profitably employed, if, instead of all cotton, she turned her attention, in part, to silk culture? Her plantations would not then be so continually desolated by a devastating crop; her banks would not then be bankrupt by her planters bankrupt by the low price of cotton; the result of over production and consequent glut of markets.

Tobacco planters, heretofore so obtuse in relation to the laws of trade, now, quickened by a sudden change into the full extent, at least of their own self-interests, begin to ask for protection in the shape of countervailing duties. When our farmers complain of the British Corn Laws, they are answered, in the fact, that there is generally as much corn raised in the United Kingdom as will suffice for consumption, and that if foreign corn was admitted free, it would only lower the price there, to the detriment of the manufacturing interest into our unsuccessful competitor.

As tobacco is not indigenous either in England or France, the enormous duty levied on it there serves to lessen its consumption, while it reduces the price to the American tobacco grower, without offering a boon to European Agriculture.

Never there was a time when countervailing duties might be tolerated, and home productions encouraged, indispensable to this nation's social health, that has now arrived. For years back we have paid for our surplus imports in United States Bank shares, stocks, &c. &c. But in the utter failure of all these devices, all balances must now be paid in coin, or a dollar of which we are told will give to the community three dollars of sound paper currency, which can keep up the prices of the real estate of the country in like ratio.

S. W.

Transplanting Trees.

When we gave some directions last season, in relation to transplanting trees,—yet we feel warranted in repeating the subject up again on account of its importance, and because it is so little understood by persons who ought to cultivate trees.

When they are taken up in the nursery, care should be taken not to allow them to become parched by drying or freezing. Oftentimes they are carried many miles in an open wagon through warm sun, and without as much as a blanket to protect them, perhaps kept a day or two in this state. If the fi-

brous roots are not all destroyed by such treatment, at least the *spongious* (tumid ends of the fibres) must be all withered; but frost when it reaches them in this uncovered state, is not less injurious if they are allowed to thaw in the open air. Bury them therefore without delay, and keep them so till the frost is all extracted. Even peach trees, which are more tender than pears and apples, have survived when planted in a frozen state. In short, guard them at the time of transplanting from both cold and dryness; and reflect how much a fresh wound through our own skin would suffer from exposure.

It is not uncommon for a farmer to determine on planting an orchard, without stopping to consider whether his ground is in a suitable condition, or not. Perhaps it is covered with grass—a meadow or a pasture. Holes are then dug just large enough to admit the roots of the trees; and if a prong should project too far, and be too stiff to bend in, a side cut is made for its special accommodation. When the roots are covered, the job is finished for that season. A friend of ours, three years ago, procured pear trees from our nursery: planted them in the manner we have described; and the season proving favorable, all of them lived, which however, he had no right to expect; and they continued to live as he informed us to-day, but with no more growth perhaps than just to keep them alive. Now what has been the result of this course? All the time since they were planted has been lost in regard to them—the period for gathering their fruit has been deferred; and the money so invested has produced no interest.

Ground to be appropriated for an orchard or fruit garden, should be ploughed deep, and rendered perfectly mellow before the trees are planted out. No better crop can be selected for this purpose, than potatoes. To those who intend to have things done in the best manner, we would recommend holes of six feet in diameter, and eighteen inches deep; but those who feel as if they could not work in that style, may dig holes four feet in diameter; and then the following directions may be useful:—

Lay the rich soil at the side of the hole; but the yellow or sterile subsoil throw back, so as to have it out of the way, and not in danger of mixing with the better materials. Chip-dirt, or something similar, should be mixed with the earth in filling the hole—perhaps one-fourth, beginning from the bottom. All trees that we have tried, seem to luxuriate in such a soil. Set them nearly at the same depth as they stood originally in the nursery; but then the earth should be raised about six inches above the level of the ground round the hole, to allow for settling—otherwise the tree in a year or two may stand in a depression.

It is important to have fine earth to throw amongst the roots, leaving no hollow, but every fibre coming in contact with the soil; and it is a good practice when filling in, to shake the stem from time to time, an inch or so up and down, to let the earth settle in between them. When it is all filled in, press the earth down firmly with the foot.

There is another way of planting trees that may do however, when a man has no spade, or is unwilling to use one; and that is, to plough trenches where the rows are to stand. Broad hoes or shovels well worked would soon make the necessary excavation; and the rich mould may be removed into it by the scraper, at the same time taking care not to mix with it the sterile subsoil.

Well, what next? Why, have every tree fastened to a stake, so that the wind shall not shake it and loosen its roots; or by pressing the stem against the earth near the surface, make a hole down which the air can reach them and dry them. It is seldom, if ever, that a young tree does well when it is bent about in that

manner, either by the wind or by the pigs. If the stake is to be upright, it should be set close to the stem; and as it might injure the roots if driven in amongst them, we prefer driving it before the tree is set, which can then be placed near the stake without danger. Sometimes however, we drive the stakes *slanting* into one side of the hole, and thus avoid bruising the roots. Strap bands are the best for fastening, because if we wrap the band once round the stake before the tree is connected with it, it prevents them from chafing.

When the trees are planted, they are not to be forgotten. Neither horses, nor cows, nor sheep, must approach them. If hogs are permitted to range there, first and foremost, the branches of the sweet brier round every tree as a sign for these animals to keep their distance. Hogs will take hints of this kind, and faithfully observe them.

Not done yet? No—we have some more advice to offer of great importance. Strawy manure from the stable or barn yard, may be very usefully employed round the trees to stimulate their growth, to keep the ground cool by shading it from the sun, and to keep it moist by retaining the light showers that fall through the growing season. But this is not all. As often as once a month, the litter should be raked off, and the ground round each tree well hoed to the distance of two or three feet, and to the depth of three or four inches. See that the workmen do it faithfully, for some may think an inch is deep enough; and then replace the manure.

A tree planted and treated in the manner recommended is almost sure to grow, if the soil is not worked when it is too wet; and will grow many times faster than one that is neglected. Besides it will come much sooner into bearing, and always bear larger and better fruit.

Agriculture in Nova Scotia.

Through the politeness of the Secretary, Dr. C. C. Hamilton, we have received a paper containing some transactions of the Cornwallis Agricultural Society. We extract the following remarks from the report of a committee on the condition of agriculture, and the best means for its improvement in Nova Scotia:—

“Your committee do not hesitate to say, that one grand cause, why our agriculture does not occupy that exalted position among us, to which it is entitled, is, the want of intelligence in the farming population.

This can only be remedied by the acquisition of agricultural knowledge, and its application to practical purposes; and your committee would earnestly recommend the members of our society, and others, to peruse the periodicals and standard works devoted to their calling, which can be so cheaply obtained, and which so much abound in interesting and instructive matter to the Farmer.

In proof of our deficiency in this respect, it may be mentioned, that although there are about 450 farms, only 12 agricultural newspapers are taken, throughout this Township. The great advantages of intellectual cultivation cannot be too highly prized, and can only be appreciated by those who enjoy them. Of all other arts and sciences, a thorough knowledge of their principles, is considered indispensable to success; surely the farmer will not remain inert, and indolent, with ample means of information within his reach, and with prospects of a speedy, and adequate reward to animate his exertions.

Your committee in directing their attention to these sources, from which our Agriculture may be revived and improved, cannot but deeply lament the withholding of Legislative assistance.

In England, Scotland, France, and the United States, &c., large sums are annually given for the encouragement of agriculture, and in proportion to the expenditure, has been its rapid advance, in all these countries. Any one conversant with the state of their agriculture, can readily draw the painful contrast.—Your committee having observed the spirit heretofore manifested by the House of Assembly, cannot forbear from urging on our members, the necessity of renewed diligence, in the hope that something may be accomplished, ere another session shall pass by.”

Fictitious Signatures.

If it were the custom in any deliberative assembly—whether at Washington or at Albany—for the orators to conceal their persons and disguise their voices by speaking through trumpets,—would their speeches interest the audience as much as they do at present?

When a person walks in, or sits down in a legislative gallery, is he satisfied to close his eyes and listen to strange voices? Would not the same sentiments and the same arguments be more interesting if he knew from whose mouth they proceeded? Is it not a laudible curiosity that prompts him when a speaker takes the floor, to ask who he is, and to whom he belongs?

Now as we presume our readers will be willing to concede the right answers to these questions, we will take the liberty to ask another. Would not the anonymous articles which are found in our columns, be more interesting if we knew who wrote them? We are free to admit the title of some writers to concealment, such as our [Fun] correspondents "Annette" and "Fanny," but to "C. D."—"S. W."—"P."—"B.," and many others, whose names if written out would shed a halo round our pages,—we feel unwilling to make this concession. We do not insist, indeed—being gratified to hear from them under any signature—but we hope they will consider how much our interests, and the interests of the community, would be promoted by such disclosures; and how much more eagerly the reader would take up our paper to learn something of his old friends and acquaintances.

For the New Genesee Farmer.

Importance of Wheat Culture.

Messrs. Editors.—To improve the true interest of the farmer, of any section of country, you must surely instruct him in the management of his lands for the production of the staple crop of the country, or to the growth of that crop for which his lands are best adapted, and which will yield him the greatest profit. It is well known that our principal profit is produced from our wheat crop. It is the adaptation of our soil to the production of this finest of grain, that will ever render our lands valuable above any others adapted only to the production of the coarser grains. And accordingly wisdom would dictate that our improvements in agriculture should tend mainly to the increased growth of this crop. It is true that exclusive wheat cropping may not be advisable; but in the management of our farms we ought to adopt a system of rotation not calculated to interfere with the growth of wheat; but rather to fit and prepare our lands for the reception of that crop. Since the settlement of this country perhaps too much attention has been turned to raising wheat, or we may have practised a bad system, and thereby drained and exhausted our lands in many cases; but having discovered this error, we must not henceforth quit our old crop and bestow our attention on other branches of farming to the neglect of this. And now, Messrs. Editors, what I would complain of in your paper, is the little attention paid by your agricultural writers to wheat growing, and the much to other things of minor importance. Perhaps it is taken for granted by all, that no information can be imparted to our farmers on this subject. The old motto that "practice makes perfect," I think will hardly apply in this case; for surely I believe that there are no greater errors committed among us, than in wheat culture; and there is no branch of cropping in which farmers more disagree than in this. For example, some think the best time for seeding is the last of August and the first of September; others think the middle or last of September preferable; some will plough an seed, others

barrow in; some think one bushel per acre sufficient, others two and others three. And also in regard to following, there is much diversity of opinion. Now these and many other points which might be mentioned, are subjects worthy the attention of some of your intelligent, practical, agricultural writers, and subjects which might be profitably discussed. If some of your able correspondents will give us a chapter monthly on the subject of wheat culture, grounded on experience and observation, there will be more good resulting to the farming interest of Western New York, than all the articles on ruta baga and mangel wurtzel that have ever appeared in all the agricultural papers in the Union. Not but that the root culture has its share of interest and credit, but in this section it is of minor importance; and surely the New Genesee Farmer ought to be adapted to its location.

Yours respectfully, R.

We fully agree with the preceding remarks on the importance of the wheat culture, and we earnestly call upon our correspondents to furnish whatever may be valuable upon the subject. We think however, that the culture of root crops is quite underrated, as it is on these that the farmer most greatly depend for the successful and profitable feeding of cattle, and consequent manufacture of manure, that prime mover in good farming, not by any means excepting the culture of wheat itself.

A premium would have been offered last year, by the Genesee Agricultural Society, for the best wheat crop, had it not been too late when the list of premiums was published.

Best Time for cutting Timber.

We suppose another age must pass away before the notion of *lunar influence* on timber will be entirely exploded. When the yielding mind of childhood receives a wrong impression from a parent or preceptor, and it is allowed to *harden* for years before Philosophy attempts to efface it, argument too often glances off like water from a goose's back.

On what does this notion rest? Why the moon raises tides on the ocean. Admitted; but on what else's influence let's? If it has not room enough to raise tides on our lakes, can it possibly raise tides of sap in the pores of a tree, where a microscope is necessary to discover them?

But if it did raise the sap, what advantage could we derive from that knowledge? It would raise tides every day; and no one particular time would be better than another.

It has been handed down to us as a rule worthy of remembrance, that "the old of the moon in February is the best time to cut timber." But why is the *old* of the moon better than the *new*? This question might puzzle a Philadelphia lawyer. The "old of the moon" may come on the first day of the month; or it may come on the last—it may differ a whole month. The sap may be frozen, and the moon not able to stir a particle. Or can it act on solids as well as fluids? If it can act on frozen timber, why not on seasoned timber, or solid rock? We cannot understand such occult principles.

We admit indeed that the time prescribed may serve well for cutting some kinds of timber; but certainly it is not the best time to cut all kinds of timber.

We believe it may be laid down as a maxim that *timber is most durable if cut when it contains the least sap*; and we have no knowledge that sap ever runs from a tree in full leaf. On a former occasion we stated a fact from an observant neighbor that basswood rails which he cut when the sap was in full flow, rotted before they seasoned, though immediately laid up in a fence. On the reverse, we have several instances of timber cut in summer that proved very durable, with not one case to the contrary. We therefore infer that

the gradation from the best time to the worst is in following order: Summer—Autumn—Winter. Winter should be cut in the Spring before the tree is full leaf.

Physiologists when treating of the function of plants, have been too fond of drawing general rules like other people, from a few observations. Because the sap of some trees, flows not in winter, they erroneously concluded it was so with *all*. The sugar maple however, flows as soon as the leaf drops in autumn; therefore to have that timber durable should be cut when the tree is in leaf; and as a leaf is employed in pumping out the moisture, it may be well to let the tree lie untrimmed till they are withered.

A timber tree may be very valuable or otherwise according to the time of cutting it; and in this country where they are growing sooner every year, it is especially important to have the best information the subject.

Discovery in Sugar Making.

The following communication came too late for this month, but we now insert it, with the hope that possibly it may not be too late for trial this season. We know nothing of the value of the proposed improvement.

For the New Genesee Farmer.

Messrs. Editors.—As the time for making Sugar is at hand, I take the liberty of sending you a section, a very simple plan for clarifying it and making a much purer and whiter article than can be done by any other means. For some time the process was secret, it having been accidentally discovered by a man whose sugar in consequence always commands a higher price and more ready sale than that of his neighbors, and who for a long time would not let me know he used it known.

The story is this:—Having once borrowed a skittle from a neighbor, on attempting to use it I found it leaked from some cracks. Hoping to render the evil he threw in some Indian meal to fill up the cracks and enable him to use it. It did so; and to my astonishment on "sugaring off," I found a better article than he was in the practice of making. As the corn meal was the only thing he could attribute to, he continued the use of it, and soon ascertained that it was a very great improvement on the common method of sugar making.

The receipt is as follows:—To the sap require 40 or 50 lbs. of sugar, add about a pint of corn meal to be put in while cold and boiled together.

The above I received casually from a farmer who has used the process, and a neighbor of him who discovered it. It is so very simple, and I am induced to believe so very efficacious, that I send it for insertion in your valuable paper, with the hope that it may prove of use to some of your readers. Should an article, I hope they will let it be known in some form or number, how it succeeded.

VERNE

Cazenovia, Feb. 25th, 1841

For the New Genesee Farmer.

Blue Grass and Quick Grass, (or Couch Grass).

Messrs. Editors.—The prevalence, tenacity, and prolific dissemination of the grass well known and designated by the name of Blue Grass, (*Poa compressa*), the increased expenses of cultivation, and greatly diminished returns of product which result from its presence in our grain fields and cultivated meadows, at once demand, and will repay, the strictest inquiry as to the most successful means for its prevention or eradication.

This grass seems to be the natural or spontaneous growth of rich, moist land in this country, and its seeds appear to be thence disseminated by domestic animals, upon the upland pasture, where the ob-

the village divide and spread its roots and seeds, filling up the soil to such a degree, that ordinary and otherwise sufficient cultivation, produces no return of grain; and land sowed for meadow where it exists in the soil, produces one or two and inferior crops of hay, and is then run out the most common mode of disseminating this by sowing clover seed chaff mixed with its having been mowed from land where it exists; in this manner whole fields, previously exempt, at once filled up with Blue Grass. An preventive in this case, will be to use the clover and sow the clean seed—although an opinion prevalent that the seed in the chaff is more vegetate and survive than if sown clean.

are pernicious, but somewhat similar variety of found on some farms in this section, called Grass or wild rye, (*Triticum repens*.) They much alike in their general character, modes vegetation, and injurious effects; and both require most thorough and persevering care in cultivation to destroy them. The extreme severity of our frosts; and also the usually continued drouth of our long summers, afford us facilities for those which are not possessed by the agriculturist of Great Britain. Numerous experiments concur in opinion that the vegetative powers of this are very much weakened by exposing the root action of severe frosts. Accordingly shallowing, (as the roots do not run deep,) applied in the fall the better, by exposing the tender to the frost—the tillage to be continued by harrowing or barrowing as soon as the land is fit in has been found very effectual. After this process is advisable to plant the ground with corn, and till it thoroughly, or to summer fallow for

in instance a very heavy coat of Blue Grass on wheat stubble, (the wheat crop was a failure,) was ploughed in the fall, and though in the spring, was wholly unfit for oats or corn. I sowed with backwheat at the usual time, producing a heavy growth, completely destroying the Blue Grass. The next season however, was much very minute Blue Grass in the supposed to have sprung from the seed; which sets the necessity that the cultivation, or the dense succeeding foliage, should be such as to prevent this result. Instances of success are stated from harrowing and rolling, performed just before planting corn. Of this the writer cannot speak from personal experience. The usual process of summer fallow, by two or three ploughings, commencing in May or June, although it may produce pretty good crops of wheat, has little effect in permanently destroying this grass, or fitting the land containing it for profitable meadow. In mowing a fallow much advantage is lost, by failing to apply the barrow, during cutting and harvest. The effects which a barrow applied, once over, every ten days, in dry, hot weather, upon all noxious grass within its action, is truly surprising. In cases where small patches of the various termed Quick Grass exists, much caution is necessary to prevent its spread by the plough and harrow; and when the soil is properly loosened, a man with a many pronged fork and basket, will find profitable employment in gathering the roots and carrying them off the land.

Meers Editors—I consider this an important subject, and have given it considerable attention for some years past; and as I have not seen much in your paper respecting it, and led to hope that the foregoing suggestions may be useful to some of your readers.

I am cordially yours, &c.

JOHN McVEAN.

Couch Grass.

The following is from a correspondent of the Yankee Farmer.

Sir—In the fall of 1839, it was recommended in your paper to kill Couch Grass by ploughing the ground late in the season, and expose the roots to the action of the frosts, by which their vitality would be destroyed. This advice was again repeated in your editorial remarks in the fall of 1840. But my experience shows me, that late ploughing will not kill Couch, or Tietch Grass, as it is sometimes called. Soon after that notice was published I turned over by ploughing, just before winter set in, a piece of ground which was very much infested by this grass. It was green sward in the spring of that year, and was ploughed and planted with Indian corn; and at weeding time, this grass so completely took possession of the ground, that the rows of corn could hardly be seen, and my neighbors inquired what kind of grain was sown there. Intending this land for turnips the next season, I turned this over by the plough, as before stated; and what was the result? Not a root of the grass was killed, and it appeared in full vigor in 1840, and the field looked as green as if covered with a crop of rye. What was then to be done? This would be a troublesome tenant with my turnips, and having the advantage of prior possession, and firmer hold of the soil, would contend strongly, and perhaps successfully against the young turnip plants, and make the chance for a small crop, or a good crop, to say the least, rather doubtful? I then determined to extirpate it, root and branch, which was accomplished in the following manner:—The ground was ploughed and barrowed, and then my men followed with their rakes, and raked out the roots of the grass into heaps which were afterwards carted into the hog-yard; and this was done three times before sowing my turnips; and this so completely destroyed it, that scarcely a root appeared in the subsequent cultivation.

AN OLD COLONY FARMER.

Plymouth Co. January, 1840.

For the New Genesee Farmer.

Education of Farmers' Children—No. 3.

Messrs. Editors—I have spoken of the useful part of education, as it either directly or indirectly influences the mind. I have taken a rather extended education for the general standard, because we are so liable to fall below than exceed the standard, whatever it may be. I wish now to consider the real object of education, the developing, exercising, training the powers of the mind. It is not so much the mere knowledge itself, valuable as that is in various respects, as it is the fitting of the mind for the business and duties of life. Of arithmetic, only a few rules find application in the business of the farmer and of most men; but who would desire his son to study only these rules while the others have a far greater educating power upon the mind. Indeed, if we contemplate only these subjects which will have a direct application and be directly practicable upon the farm, they will be found very few, and the influence of education exceedingly trifling, as the time taken to obtain it must be very short. Indeed, of what benefit will be much acquaintance with the art of reading, if only utility is to be studied in all our reading; if only there must be a direct employment of the knowledge on the farm. By such an education the mind must be left almost untouched. It will be rude and unpolished in its thoughts, low and common in its language; it will be left under the control of the animal nature chiefly; it will have only coarse views and notions of morality and religion, and of responsibility and obligation, it will be more subject to the power of temptation, and more easily seduced into the ways and works of folly and wickedness; or, it must be preserved from vice and crime by the fear of punishment and the strong arm of power, and not by those ennobling moral principles which are suited to our nature and circumstances.

The young farmer needs this cultivation of mind, this training of the intellect which education gives to prepare him for reading, and all the benefits of that knowledge which now fills the world. A taste for

reading is as much made and acquired as a taste for any thing. The untutored mind can have no relish for it, unless it is for the marvellous; the curiosity must be excited, or no motive will be presented to the mind little trained by culture.

The young farmer needs this cultivation too, that he may have an inducement to employ his mind daily, or often, upon books. The great improvement of mind is made by reading regularly for a short period every day. The instances of this, though far too rare, are abundant to show the great consequence. "Great effects from little causes," is the rule of Providence, and ought to be the motto for action. The diligent hand maketh rich, in whatsoever it undertakes.

The young farmer needs this cultivation also, that he may have some just estimate of himself and have more influence in the world. There must be superior wisdom in him that guides others. Trick and planning and wiles may succeed perhaps for a time; but all such arts must fail in the end because the ignorance will be disclosed, or the superior wisdom of others will be discerned. Even good common sense, that best of all human endowments of the intellect, must have knowledge and principles to exercise its power. Trust cannot operate without some materials to act upon and to work with.

The young farmer needs this cultivation also, that he may have some adequate notions of the necessity and advantage of education and moral principles in a free community, and may labor for the wider and more general extension of knowledge and virtue. Standing as the very bone and sinew of society, he must have the strength and power which will sustain the interests of society. For this end, education in its general meaning, the training of the mind and heart, is the great means.

I have spoken of the wants of the young farmer in these several respects, for their bearing upon the main object of those papers, that the interests of the farmer suffer from the too limited education of his sons compared with that of his daughters. I have already said that I would not diminish the one, but increase the other. These views are not new indeed to many intelligent farmers, but they need to be diffused over the community. They cannot be fully appreciated without ensuring correspondent action.

I was about to enjoin some views upon the ornaments, as connected with the education of our children, but must defer them to another time. D. C.

March, 1841.

Sugar Beets.

Messrs. Editors—Agricultural chemistry may indeed cavil at the supposed value of Sugar Beets as food for animals; but the results which nature gives, clearly prove that there are some wonder working secrets in vegetable physiology, which science has not yet discovered.

A neighbor of mine, who is a first rate gardener, told me that he had raised 60 bushels of Sugar Beets last year on an incredible small space of ground in his garden. I asked him which was the most profitable, corn or sugar beets. He replied, both. I then named potatoes, when he burst out into a horse laugh, and said that he could raise ten bushels of beets easier than one of potatoes, and that his cow gave more milk when fed on beets. Added to this, he said that potatoes wanted digging, and that too, by daylight, in short and often wet days; but that any quantity of sugar beets could be plucked and housed in a single clear evening, and that the trouble of securing the two crops was also ten to one in favor of beets.

SENECA.

Seneca co., March 14, 1841.

Gardening for April.

The weather during the past month has been so wintery that but little could be done in the garden except with hot-beds. No time should be lost this month, when the weather will allow, in commencing the operations of spring. Manure can best be carried on when the ground is frozen. Prune or trim fruit trees and bushes; repair espaliers, and procure new stakes for raspberry bushes, &c. Dress asparagus and rhubarb beds, and carry off, or burn all litter and rubbish. As soon as the ground is in good order, select and prepare the best apartments for early planting, and begin to plant or sow the more hardy vegetables.

Onion sets should be planted, and Peas, Lettuce, Spinage, Parsnip and Salsify seeds sown as soon as possible. Towards the latter part of the month, (earlier in Ohio and other States south of this) sow seeds of Carrot, Beet, Onion, and plant English Beans and early Potatoes; and, if not sown in a hot-bed, sow Cabbage, Cauliflower, Broccoli Tomato Pepper, Celery, &c. on a warm border where they can be covered with mats in time of frosts.

In Ohio, and wherever danger from frost is not apprehended, most kinds of garden seeds are sown early this month; but in this state, severe frosts sometimes occur as late as the last week in May, and tender plants must not be exposed till after that time. It will then be time to sow Cucumber, Melon, Squash, Pumpkin, Beans, Corn, Radish, Turnip, &c.; also, most kinds of herb and flower seeds. For remarks on sowing flower seeds, see Vol. 1, P. 56.

"* Ill health of Mr. Batcham must be an apology for the brevity of the remarks under this head.

Flowers in England.

From the Gardener's Chronicle of "Feb. 6, 1811," published in London, and edited (in part) by Professor Lindley, we make the following extracts:—

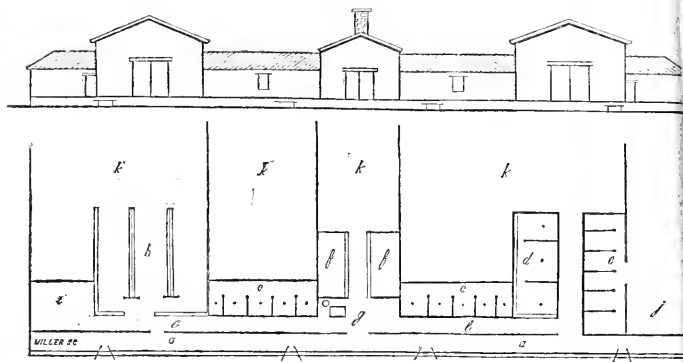
"*Pentstemon miniata*, a pretty bulbous plant from Cusco in Peru, allied to *Pancratium* and *Narcissus*, produces its clear scarlet flowers readily, and grows very freely."

"*Geranium rufifolium*. The erect habit of this plant, and its large flowers distinguish it from *G. nepalense*. It is a neat hardy perennial, scarcely exceeding a foot in height. It should be planted in light soil, or on rock work, as it is destroyed by the wet in winter. It flowers in July and August; and may be increased by dividing the roots when in a dormant state, or by seeds, which are produced freely, but the seedling will not flower before the second season. It was raised in the garden of the Horticultural Society, from Himalayan seeds presented by Dr. Royle in May 1839."

"*Dahlias*. A correspondent of the *Horticultural Magazine*, gives a long list of Prize Dahlias, from which we extract the following names of varieties, which according to this writer have gained more than fifty prizes at the shows for 1840.

Aimée (Mountjoy's), 79.
Argo (Widnall's), 51.
Beauty of the plain (Sperry's), 89.
Climax (Jellery's), 89.
Conductor (Widnall's), 62.
Delance (Cox's), 67.
Duchess of Richmond, (Fowler's), 63.
Essex Royal (Sorrell's), 109.
Eva (Foster's), 73.
Grace Darling (Dod's), 115.
Hope (Neville's), 105.
Lewisian (Laird's), 98.
Marquis of Lothian (Goodhall's), 123.
Mary (Dod's), 92.
Miss Johnstone (Willson's), 87.
Ne Plus Ultra (Widnall's), 92.
Rienzi (Widnall's), 100.
Rival Sussex (Stanford's), 109.
Springfield Royal (Inwood's), 122.
Suffolk Hero (Girling's), 118.
Topaz (Girling's), 77.
Unique (Ansell's), 164.
Virgin Queen (Protheroe's), 87."

"*Rhododendron maximum* grows much better in shade than in sunny situations; the foliage is often four times the usual size, and of a much finer green."



WM. R. SMITH'S FARMERY.

EXPLANATIONS.

a, Root cellar filled from the windows, 10 feet wide including walls. *b*, alley, boarded on the stable side to the top of the mangers, four feet wide. *c*, stalls for the cows, &c., seven feet wide. *d*, ox stables, 8 feet wide. *e*, stalls for the horses, 5 feet wide. *f*, apartments for the *swill* bays. *g*, room for boiling, slicing roots, &c. *h*, sheep troughs, with racks communicating with the loft above. *i*, calf shed. *j*, wagon shed. *k*, barn yards. Note.—The upper part of the above cut is a front view, and the lower part a ground plan.

For the New Genesee Farmer.

MESSES. EDITORS.—It is very probable that the sketch of the barn above may strike many persons as being altogether too large and expensive for general use. This is doubtless true to a certain extent. Indeed my only hope is that some persons may profit by some things described, as I have no expectation but that glaring faults will be found in the plan. The inconvenience resulting from want of arrangement in our farm establishments is also great.

On many farms, having nearly or quite as many buildings as those described, the barns, &c. are so placed as to require much additional labor in passing from one to the other, and in the feeding of the animals.

MANURES.—The man who at the present day neglects this important branch of labor, ought to be looked upon as laying the foundation for future poverty. Yet, I venture to say, that not one person in fifty who builds a barn, takes this subject into consideration, unless he may do so for the purpose of finding, as a friend of mine did, a high knoll, that the wash of his yards might give him no trouble.

Several methods have been proposed for saving and increasing manure, but on the whole, the plan adopted by Judge Bucl seems to me best adapted to our circumstances. This consisted, as the readers of the "Genesee Farmer" will remember, in shaping the yard like a dish, leaving a margin of ten or twelve feet quite round the outside. With this, if straw be freely scattered weekly over the whole, and the litter from the stables wheeled out and spread, subject to the treading of the cattle, ten times the usual quantity will accumulate.

Again, it is the decision of some of our best New England farmers that pork making is a losing business, unless particular attention be paid to the compost heap. If this be true where great economy is used in feeding, what will be the fate of those, who, like myself, have no boiling apparatus nor economical hog yard?

In the sketch, I have placed this yard in the centre, where the excavation is the deepest.

Roots are justly coming into general use; but no systematic mode of feeding can be adopted unless they are accessible at all times. The long, narrow cellar exhibited in the plan, I think will be found very convenient. A sort of hopper with a grated bottom might be placed in the windows, into which the cart would be emptied.

The extreme wing at the right in the elevation is the carriage and tool house; to the left of this is the grain barn, say 32 feet front by 45 feet deep, leaving long, narrow bays on each side the floor. The straw stack is directly back of this, and on the west side of the yards.

The centre building has the corn crib and general store room, occupying two-thirds of its length from the back end, which communicates by a trap door with the boiling vats below.

The front is used for a shop, stairway, &c.

To the right and left of this are the hay lofts, which communicate with the feeding alleys below.

The large building on the left, corresponding with the grain barn, covers the sheep house—the plan of which may be thought somewhat whimsical. I know the strongest of these useful animals can live, though exposed to the storms of snow and sleet incidental to stack feeding; but it is susceptible of the cleanest proof, that the expense of a comfortable shed is more than paid for by the increased quantity of wool and flesh. I propose that ranges of feeding troughs, four in number, should be placed in the basement, running from the alley to the back end. These are to consist of a rack, and manger at the bottom; the two outer ones single, and placed against the wall; the inner double, that is, to supply food from each side. The racks will communicate with the floor above, from which they are to be supplied with hay.

A narrow floor communicating with the doors shown in the figure, runs the whole depth of the building. On each side are the hay mows, which are raised seven feet above the level of the floor, that the racks may be accessible. In this way a large number of sheep can be provided for in a small space, and without waste of time or food. The small wing on the left is the poultry house.

In the stables two cows or oxen occupy the same stall. The ground floor should be paved, as being better in every particular than planks.

Macdon.

WM. R. SMITH.

N. Y. Legislature—"Bill to promote Agriculture."

We stated last month that no report had been made in the Legislature on the petitions for the encouragement of agriculture; and such we still consider to be the fact, although some may think we are mistaken. It is true, Mr. Johnson, sometime in the early part of the session, before the petitions from the Western part of the State were received, offered what was called "A Bill to Promote Agriculture;" but its provisions were so meagre, and so unlike what the farmers asked for, that we were in hopes the committee, on the receipt of the petitions, would become ashamed of their bantling, and report something more in accordance with the petitions, and more worthy of the EMPIRE STATE. But a warm friend of the cause, who has spent some days at Albany, informs us that this bill is likely to become a law, without improvement, and without opposition.

'Half a loaf is better than no bread,' it is true; and the passage of this law will doubtless be a great benefit; but we shall certainly feel a degree of shame in announcing to the world that the great and wealthy State of New York has passed a law for the improvement of agriculture, and appropriated only \$7000 per annum to the purpose.

The bill before the House provides that \$7000 be appropriated annually for five years, in the ratio of \$50 to each member of Assembly, and \$600 to the State Society. When any County Society has raised by voluntary subscription any sum of money, the comptroller is authorized to pay an equal sum, provided it is not greater than the sum appropriated to that county. No mention is made of Commissioners.

It is proper to inform our readers that this bill was framed in answer to the petition of a few individuals about Albany—self-styled the N. Y. State Agricultural Society—who it will be seen, were careful to provide for their own interests. But, as yet, no notice has been taken of the numerous petitions which have been filed by the yeomanry of Western New York.

We have seen no account of any further action in the bill for the encouragement of Silk Culture. We hope the members of the Legislature will not disregard the wishes of their constituents and the interests of the State so much, as to neglect these matters till it is too late to secure their passage.

Horticultural Meeting.

Agreeable to the call published in our last No., a meeting was held in the Lecture Room of the Young Men's Association in this city. Dr. Moses Long was called to the Chair, and H. M. Ward, Esq. appointed secretary.

After some discussion, it was agreed to form an association to promote the interests of Horticulture, to be called the MONROE HORTICULTURAL SOCIETY; giving to persons residing in other counties, the privilege of becoming members if they wish to do so.

On motion, a committee of five was appointed to prepare a constitution for the society, and report at the next meeting.

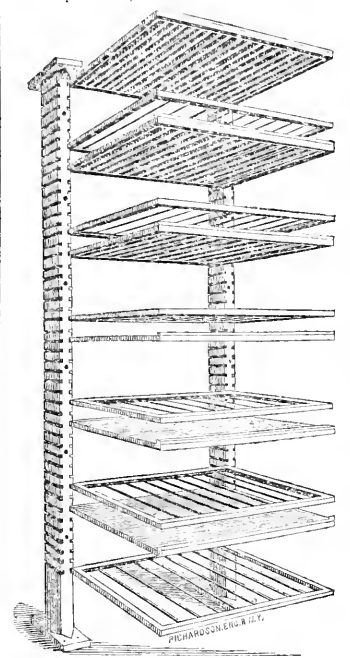
The following persons were nominated: Silas Corbitt, S. O. Smith, H. M. Ward, P. Barry, Benj. Hill. The meeting then adjourned to meet in the same place on Thursday, March 25, at 2 o'clock, P. M.

A meeting was held agreeable to the above adjournment, but not being so numerously attended as was anticipated, and the committee being unavoidably absent, it was thought proper to postpone the adoption of a constitution until the first Thursday (being the 6th) of next month.

May next. The meeting adjourned to meet on Monday at the same place, at 2 o'clock, P. M., for the purpose of organizing the society.

The friends of Horticulture in Monroe county, (and those who please from adjoining counties) are respectfully requested to attend.

According to our promise, and the request of several subscribers, we here give a description of the "Burlington Silk Frames," mentioned in our Feb. No.—The engraving and remarks below, render the subject quite plain. If any persons in this vicinity desire to obtain any of the frames, they can leave their orders with our publishers, at the Rochester Seed Store.



BURLINGTON SILK FRAME.

This simple yet complete apparatus for feeding Silk Worms, invented and patented by Edmund Morris of Burlington, N. J., has been found, after repeated trials to accomplish the following important objects.—

1. It secures the most thorough ventilation to all parts of the frame on which the worms are feeding, below as well as above, and obviates them of necessity, to clean themselves of their excrement and other rubbish.
2. That part of all former modes of feeding which requires *rearing* for the worms to mount upon fresh foliage in order to clean them, is entirely dispensed with; and though cleaning is never necessary, yet should the worms require changing, it is done almost instantly, a thousand at a time, and without the worms being conscious of the change.
3. The whole apparatus is as portable as a quilting frame; and all the parts which require handling during the feeding season, are as portable as an umbrella, without being liable to breakage.
4. Ventilation and cleanliness are so perfectly accomplished, that disease seems out of the question, unless originating in the egg.
5. The age (from the spinning) of any number of cocoons, from one thousand up to a million, is identified to a day, and they are gathered with six times the facility of the hurdle system, at the same time coming out perfectly clean, and with but little waste of loss.
6. By using branches, cut down with a grass hook or scythe, it saves more than one half the usual expense of gathering foliage and feeding it out to the worms, and more of them are accommodated in the same space.
7. It is cheaper and more durable than the hurdles. All the purchaser is required to do after receiving his frames, is to put in a few nails to support his uprights, and to put straw into his spinning roofs, and the whole contrivance is complete and ready for use.
8. The vast superiority of this over all other fixtures for feeding silk worms, is such as to be apparent even to persons not acquainted with the rearing of them;

while intelligent gardeners, practically conversant with the business, have pronounced, without a single exception, that it fully accomplishes all that has been said above. It has been tried repeatedly and found successful in practice, and may be seen at the Burlington Fair, where persons interested in the silk business are invited to examine into its merits. It rejects the hurdle system entirely, and is original in all its parts. A frame sufficient to feed 6,000 worms, may be seen at Jos. Leeds' U. S. Silk Agency, No. 2 Franklin Place, Philadelphia, the proprietor of which has been appointed agent for the sale of frames and rights, to whom, or to the proprietor at Burlington, successful application may be made. An engraving, post paid, full description, will be sent on application, post paid. Gentlemen about to erect cocoons, will find it highly important to examine the capabilities of this Frame, previous to erecting any other fixtures.

The most unqualified approbation has been awarded to this Frame by the numerous visitors who have examined it, and none have made any objection, or expressed a doubt of its capabilities. Many large cocooneries are now being fitted up with it, for the coming season, and others are building, in which no other fixtures will be used.

The Patentee proposes to manufacture and sell these Frames, or to dispose of the right to individuals to make them for their own use, in order to accommodate those who reside so far from this city as to make the cost of transportation too heavy a tax for them to pay, in chase here. In either case, however, the purchaser should make his own uprights, as the freight would be costly. Each upright, 8 feet long and 6 inches wide, by 2 inches thick, contains 8 feet, costing about 10 cents for hemlock or pine—the expense for making grooves is about 6 cents for each upright. Ten of them will accommodate 54 frames, each 3 by 4 feet.

The price for a feeding frame and roof, calculated for the worms to spin in straw, will be 60 to 70 cents for the two—and this latter kind is greatly preferable to the both roofs. The worms are remarkably fond of spinning in straw so arranged, the cocoons are gathered with equal facility, and come out perfectly clean, without waste of loss.

To those who prefer to make their own frames, the prices of rights are as follows:

For the right to make and use		
50 frames and 50 roofs		5 dollars.
100 " " "		10 "
300 " " "		20 "
500 " " "		30 "
1000 " " "		50 "

These frames can be manufactured by the Patentee at a cheaper rate than any individual can furnish them for himself, as machinery will be used for the purpose.

The proper size for the frames and roofs, is 3 by 4 feet, which will accommodate 1500 or more worms. The dimensions can be varied to order. The straw roofs are covered with muslin or light pasteboard.

Application may be made to Edmund Morris, Burlington, N. J., or to Joseph Leeds, Agent for the Patentee, No. 2 Franklin Place, Philadelphia.

Agricultural Implements Wanted.

There is considerable demand for approved agricultural implements in this place; and if a good assortment were for sale here at moderate prices, the demand would soon be very great. But there are but a few kinds manufactured in this region, and the trouble and expense of obtaining them, from the east, are so great that many will not be obtained from there. We would therefore invite some enterprising mechanic from the east—one who is familiar with the different approved implements of the day—and who has a little capital to invest, to come and establish a manufactory in this city. Here are the best of many facilities for the business, means of transportation in every direction, and the New Genesee Fair intelligently all over the Western World. Now, who will come? Any communications addressed to the publishers of this paper will receive attention.

Apparatus for Labor

Professor Dewey informs us that he has mentioned in another column for a "may perhaps be more easily obtained" Spencer, Canastota, Madison (will send a catalogue of prices if you direct a letter, post paid, to him such selection can be made; the order will be speedily attended to.

atories.
at the articles mentioned in the
Cheap Laboratory,
near Charles A.
No. 1, N. Y. Mr. S.
any person who will
From the catalogue
is may be desired, and
ded to.

For the New Genesee Farmer.

Castor Oil Beans—Ricinus.

The cultivators of the soil, and indeed all classes of citizens, have reason to rejoice that this invaluable medicinal seed, is likely to be turned to a very useful account in the domestic economy of every housekeeper. If there is any truth in the following statement taken from the Peoria (Ill.) press, the composition described below may serve the whole country as a substitute for sperm.

"An important discovery was made about ten years ago, by Mr. Isaac Smith, of Eastville, Northampton county, Va. which enabled him to render castor oil equal if not superior to the best sperm for burning in lamps, and for which he intended to take out a patent. This he never did, and permission has since been given to make the improvement known for the benefit of the public. The method of preparing the oil is, merely to mix with it spirits of turpentine, with which it readily combines; in proportion of one of the latter to four of the former.

"Now, since sperm oil is becoming scarcer, and the demand for it increases, the citizens of the west especially will find it to their interest to take advantage of the knowledge of this composition.

"As to its excellence, there is but one opinion among those who have tried it. A lamp filled with this composition will burn four or five hours without the slightest appearance of crust upon the wick, and on extinguishing the flame, there is no fire remaining in the wick, as is generally the case with sperm oil, except of the very best quality—indeed, in the extinguishing and re-lighting a lamp of this oil, there is a strong similarity to that of a gas light. But it burns perfectly free from smoke or the least degree of offensive smell—emits a clear and powerful light, and never congeals in the coldest weather."

The main difficulty experienced by those who have undertaken to cultivate the castor bean in a small way in this latitude, has arisen from a want of knowledge how to purify the newly expressed oil, so as to prevent its becoming very rancid and unfit for use. Perhaps a plain and concise explanation of this process which has long been held as an important secret by the manufacturers of pure "Oleum Ricini" may be of service to some of your numerous readers.

This oil is extracted from the bean either by soaking it in boiling water and then subjecting it to a weighty pressure; or by bruising the seed and expressing the oil cold. The latter is called cold expressed, and the former hot expressed oil, in the market. Most of the castor oil consumed in the United States is imported from the West Indies. This, as well as a thousand other articles sent to us from abroad, ought to be produced at home and largely exported. Good oil is now worth by the quantity in New York one dollar and thirty-eight cents a gallon, which can be obtained from a bushel of beans. Land well adapted to their growth, and properly cultivated, will yield in this latitude from twenty-five to thirty-five bushels to the acre. The expense of growing and harvesting does not greatly exceed that of an acre of corn. The press and other machinery used for the manufacture of linseed oil will answer very well for making castor oil. The proneness of this oil, and indeed of all fixed vegetable oils, to become rancid, arises mainly from the mucilage which is intimately blended with it when expressed. Mucilage is quite insoluble in boiling water, hence if we put crude oil and water together in the proportion of five quarts of water to four gallons of oil and gradually heat them over a moderate fire, the mucilage will rise to the surface in a thick scum. All of this should be carefully removed with a skimmer into a vessel for further purification. The skimming should be continued during ebullition as long as any scum arises. The boiling should be kept up until all the water is evaporated, when the oil should be removed from over the fire, otherwise it will burn. It should then be put up in clean tight bottles or casks, and is ready for market. Other oils may be purified in the same way.

There are but few farmers who could not find room and time to cultivate an acre or two of the castor bean without interfering materially with their other farming operations. It should be planted on a warm, rich soil, and as early in the spring as can be done and escape frosts. The hills and rows ought to be about four feet apart. In warmer climates they are placed five feet asunder, because the plants grow much larger than they will in Western New York.

There is an establishment erected at Peoria, for the manufacture of castor oil, the proprietors of which offer to contract for all the beans they can obtain at one dollar a bushel. May the best success attend the enterprise.

Yours truly, D. L.
Buffalo, March, 1841.

QUERY.—Will the Ricinus thrive and produce seed to advantage, in as cold a climate as of this State?—Lus.

For the New Genesee Farmer.

Chemical Laboratory.

Messrs. Editors:—As you have not given a reply to the question on the *articles and cost of apparatus for a cheap laboratory such as a farmer would need*, I submit the following. It is difficult indeed to give any very definite statement, because the object designed to be accomplished by the apparatus is not stated. I suppose, however, that the mere examination of soils, as the analysis is rather difficult, long, and perplexing, is not the object. Should that alone be the object, a few crucibles, tumblers, wine glasses, plates and vials, with tongs for handling the crucibles, and scales for weighing accurately to half a grain, would be necessary, and cost two or three dollars. To these should be added several small bottles of chemical tests, such as acids, alkalies, nitrate of silver, oxalate of potassium ammonia, which cost three dollars more, and for the whole,

\$6 00

For General Illustrations of Chemistry.

Pyrometer to show expansion of solids,	4 00
Pair of Bell heads " " liquids, 50	1 25
6 Florence Flasks for boiling liquids, 6d	37
Wires for showing conduction of caloric,	1 00
2 Air Thermometers, 20c, and 1 Fahrenheit, \$3,	3 20
Pair of Tin Mirrors for reflecting caloric,	4 50
Bell for do do, and Air Thermometer, 4s,	1 00
3 feet of Glass rods, 18d, and Iron stand and rings, \$2,	2 18
Argand's Lamp \$2 50, and spirit lamp 50c,	3 00
Fire pump or air condensing Fire Engine,	1 00
2 pint Retorts 6s, and 2 half pints 4s,	1 25
1 Gas bottle \$1, and Tin pipe to conduct gas 4s,	1 50
Gun barrel for procuring oxygen,	1 00
Or an Iron bottle for the same,	2 00
And 6 feet lead pipe to conduct it,	50
1 pint receiver closed at top, or large tumbler,	37
1 quart receiver with ground stopple to burn Iron wire in oxygen,	1 25
Small gnomometer to hold oxygen,	3 00
Or two small gnomometers in a small cistern to hold oxygen and hydrogen,	4 00
And compound Blow-pipe for the brilliant experiments,	4 00
Tin pipe for burning stream of hydrogen,	4 50
And 2 glass tubes for musical tones,	75
Iron turnings for hydrogen,	25
Bottles of acids and alkalies,	2 60

The preceding articles would enable a man of some experience, to perform a great many experiments—Most of the articles wear out with use, and some break easily. Some knowledge of chemistry will enable the enquirer to select from the preceding such articles as would be best suited to his object. The whole amounts to less than fifty dollars. A good selection might be made for thirty dollars. I have been willing on this account to give the articles more numerous than may be desired.

If it is wished to add experiments in Galvanism, I shall be happy to give any information in my power.

It is ardently to be desired that some of our independent farmers might succeed in establishing small laboratories, and in exhibiting the more common and general parts of chemical knowledge. C. DEWEY.

March, 1841.

Hints to Western Emigrants.

Drink cold tea, or buttermilk diluted with water, but no whiskey. Go out of your ploughed and newly cleared fields before the sun is down, and the morn begins to rise, and keep in doors in the morning until the sun has dispersed the same.

In hot weather make a fire in your house every evening, to dry and cleanse the air. For ordinary medicine, drink strong bosnet tea; if very bilious, take Gregory's Pills, (not the spurious sort,) they contain antimony, but no calomel.

Few and simple are the above directions, had they been strictly followed, many lives might have been saved, and hundreds of congestive fevers prevented.

The history of deaths by fever at the west, is but a combined detail of gross neglect and still grosser ignorance. Some men think that as long as they have a morbid appetite to eat, they have no need of medicine or a physician; and when a physician is called, he is looked upon as a magician whose office it is to raise the dead.

I once asked a physician how one of his patients got along. He is very sick said he, but he will not die, for his wife is a better physician than I am, and all of a nurse to boot. I asked in relation to another patient. He is not dangerously sick, said he, but I fear they will kill him—don't you think they were trying to feed him toasted cheese and fried cake.

GENESEE.

From the Albany Cultivator.

N. Y. STATE AG. SOCIETY

Albany, Feb. 10, 1841.

Pursuant to public notice, the New York State Agricultural Society met at Knickerbocker Hall at Albany, this day at 11 o'clock A. M. The Present being absent, ALEXANDER WALSH, Esq., one of the Vice Presidents, took the chair, and JESSE BUEL was appointed Secretary pro tem. A quorum being present, the minutes of the last meeting were read. The Report of the Treasurer, C. N. BEMENT, Esq., was then received, read, and accepted.

The Constitution of the Society being called for, was read, when several amendments were proposed by Messrs. TUCKER, NORT and FULLER, which, after discussion, were adopted, and the revised Constitution directed to be published as follows:—

Constitution of the N. Y. State Ag. Society, As Amended Feb. 10, 1841.

The style of this society shall be "The New York State Agricultural Society;" its objects shall be to improve the condition of agriculture, horticulture, and the household arts.

Sec. 1. The society shall consist of such citizens of the State as shall signify, in writing, their wish to become members, and shall pay on subscribing not less than one dollar, and also of honorary and corresponding members.

The presidents of county agricultural societies, or a delegate from each, shall ex-officio be members of this society.

The payment of fifty dollars or more shall constitute a member for life, and shall exempt the donor from annual contributions.

Sec. 2. The officers of the society shall consist of a president, eight vice presidents, one to be located in each Senate District; a recording secretary, a corresponding secretary a treasurer, an executive committee, to consist of the officers above named and five additional members, of whom three shall form a quorum, and a general committee, the members of which shall be located in the several counties, and be equal to the representatives in the house of assembly.

Sec. 3. The recording secretary shall keep the minutes of the society.

The corresponding secretary shall carry on a correspondence with other societies, with individuals and with the general committee, in furtherance of the objects of the society.

The treasurer shall keep the funds of the society, and disburse them on the order of the president or a vice president, countersigned by the recording secretary; and shall make a report of the receipts and expenditures at the annual meeting in January.

The executive committee shall take charge of and distribute or preserve all seeds, plants, books, models, &c., which may be transmitted to the society; and shall also have the charge of all communications, designed or calculated for publication, and so far as they may deem expedient, shall collect, arrange and publish the same in such manner and form as they shall deem best calculated to promote the objects of the society.

The general committee are charged with the interests of the society in the counties in which they shall respectively reside, and will constitute a medium of communication between the executive committee and the remote members of the society.

Sec. 4. There shall be an annual meeting of the society on the third Wednesday in January, in the city of Albany, at which time all the officers shall be elected by a plurality of votes and by ballot, with exception of the general committee for the counties which may be appointed by the executive committee, who shall have power to fill any vacancies which may occur in the officers of the society during the year. Extra meetings may be convoked by the executive committee. Fifteen members shall be a quorum for the transaction of business.

Sec. 5. The society shall hold an annual cattle show and fair at such time and place as shall be designated by the executive committee.

Sec. 6. This constitution may be amended by a vote of two-thirds of the members attending any annual meeting.

A committee of fifteen was appointed to nominate officers of the society for the ensuing year, to report to a meeting to be held at the Senate Chamber, at 3 o'clock, P. M. to-morrow. Adjourned to 3 o'clock, P. M.

Feb. 10, 3 o'clock, P. M.

Met pursuant to adjournment, for the purpose of complying with the invitation of EZRA P. PRENTICE, Esq., to visit Mount Hope Farm, near this city, to view the beautiful and extensive herd of Improved Short Horns owned by Mr. P. The company, some fifteen or twenty in number, after an examination of the Short Horns and South Down sheep at Mount Hope, with which they were highly pleased, were taken by Mr. Prentice to Mr. Conning's farm, where they had an opportunity of viewing a portion of the Hereford cattle and Cold-wind sheep imported by Messrs. Corning and Southan the past season.

Senate Chamber, Feb. 11, 3 o'clock, P. M.

Met pursuant to adjournment, H. D. GROVE, Esq., one of the vice presidents, in the chair. The committee appointed to nominate officers, made their report, which was read and accepted; and the following gentlemen were unanimously elected officers of the society for the ensuing year:—

JOEL B. NOTT, of Albany, President.

Vice Presidents.

- 1st district, JEROMUS JOHNSON, of Kings.
- 2d " ROBERT DINAMON, of Orange.
- 3d " CALVEE N. BEMENT, of Albany.
- 4th " EDWARD C. DULLEVAN, of Saratoga.
- 5th " BENJAMIN P. JOHNSON, of Oneida.
- 6th " LEWIS A. MORRILL, of Tompkins.
- 7th " WILLIS GAYLORD, of Oswego.
- 8th " T. C. PETERS, of Genesee.

Additional Members of the Executive Committee.

ALEXANDER WALSH, of Rensselaer,

GEORGE VAIL, of "

HENRY D. GROVE, of "

JOHN D. LINTX, of Schenectady.

HENRY S. RYLAND, of Albany.

HENRY S. RYLAND, of Cortland, Cor. Sec'y.

EZRA P. PRENTICE, of Albany, Treasurer.

LEWIS TUCKER, of Albany, Recording Sec'y.

The following resolution was introduced by J. J. VAIL, Esq., of Rensselaer.

Resolved, That a committee of five be appointed to prepare, and present, a memorial to the Legislature, now in session, praying for an appropriation of \$7,000 annually, for the benefit of agriculture, to be distributed to the several County Agricultural Societies in the ratio of \$250 to each member of Assembly, and the sum of \$500 to the State Agricultural Society; the

money to be paid to the several Societies when they shall have raised an equal sum.

After an animated and interesting discussion, in which Messrs. VAIL, JOHNSON, ROOF, PETERS, and others, took part, the resolution was unanimously adopted, and Messrs. VAIL, TUCKER, BEMENT, McINTYRE and VAN BANGOR, were appointed a committee to memorialize the Legislature for the purpose expressed in the resolution.

Several Reports were received from Committees appointed at the last meeting, to report on various matters of practical agriculture, which will be published hereafter.

On motion of C. N. BEMENT, Esq., it was Resolved, That the Executive Committee be requested to procure reports from different members of the Society, on the following subjects, to be presented at the semi-annual meeting.

- 1. On the most approved method of stall feeding oxen and other neat cattle.
- 2. On converting green crops and other vegetable matters into manure.
- 3. On the best method of increasing manure and forming a compost.
- 4. On the proper time to cut Timothy and other grasses, and the most approved method of curing the same.

5. On the comparative economy of employing oxen and horses in the usual business of the farm.

6. On the comparative economy of potatoes, ruta baga, carrots or beets, as food for cattle, sheep, and swine.

7. On the relative value of apples as food for swine, or other domestic animals, compared with making them too rider.

8. On the best means of eradicating Canada thistles.

A Resolution was adopted requesting the President elect to deliver an Address in the Assembly Chamber, in furtherance of the objects of the Society, on the evening of the 23d inst.

Assembly Chamber, Feb. 23, 1841.

The Society met pursuant to adjournment at 7 o'clock, P. M. The Hon. JEROMUS JOHNSON, Vice President from the first District, took the chair and called the Society to order, when the President, J. B. NOTT, Esq., delivered an address, replete with eloquence and instruction, which was listened to by a large and attentive audience with great satisfaction. The thanks of the society were tendered to Mr. NOTT, and a copy of his address solicited for publication.

Meeting of the Executive Committee.

The Executive Committee of the New York State Agricultural Society, met at the office of the Cultivator, Albany, on the 23d of February—the President of the Society in the Chair. A letter was read from P. B. JOHNSON, Esq. Vice President, expressing his regret that he should not be able to attend the meeting. Mr. J. says—"It will afford me great pleasure to communicate with you at all times in relation to the interests of the Society, and to unite with the officers in such measures as shall be best calculated to promote the interests of Agriculture in our State. I hope something will be done in aid of our objects by the Legislature; and could County Societies be established and sustained, it appears to me that great good will result."

A letter was also read from Col. H. S. RYLAND, Cor. Sec'y., accepting the office, and assuring the committee that he will devote himself zealously and untiringly to the cause. He says—"I wish you would express to the committee the deep regret I feel in not being able to meet them. Say to them, that as one of their body, were I present, I would counsel action,—decided energetic action. A mere formal organization—a nominal Society merely, is useless—nay, the next thing to ridicule; and unless I greatly mistake the signs of the times, effort on our part will be met with more of corresponding spirit, than it has been in preceding years."

After the appointment of a part of the County Committees, the business was postponed, and a committee appointed to make the necessary inquiries and report suitable means at the next meeting.

A committee, consisting of Messrs. TUCKER, PRENTICE, and McINTYRE, was appointed to report a code of By-Laws, and Regulations for the better management of the affairs of the Society.

The following resolutions were unanimously adopted:—

- 1. That the Executive Committee will hold regular monthly meetings on the Third Wednesday of each month, at the room No 7, Exchange Buildings, Albany, at 3 o'clock, P. M.

2. That to enable this Society to carry into effect the great objects of its formation, it is necessary to raise the sum of \$1,500, in addition to the aid expected from the State.

3. That as one means of increasing the funds of the Society, the Corresponding Secretary address a circular letter to the members of the Executive and General Committees, urging upon them the necessity of immediate and persevering personal exertion to increase the number of both life and annual members of the Society.

4. That the Recording Secretary prepare and report at the next meeting, a correct roll of the members, specifying those who have paid their annual dues, and the sums due from those in arrears.

5. That the Executive Committee will decide upon the place of holding their First Exhibition and Fair, at their regular meeting in April; and that a committee of nine be appointed to report on the Premium List, so far as practicable at the March meeting. The committee consists of Messrs. McIntyre, Walsh, Bement, Randall, B. P. JOHNSON, Grove, Gaylord, Morrill, and Peters; and it is expected they will report individually, their views in relation to the objects which should be made subjects for premiums.

Treatment of Peach Trees.

A respected correspondent in the State of Ohio, says: "Two years ago last fall, I scalded a part of my peach trees. On removing some of the soil, the worms were exposed in various positions; and all the trees that I scalded at that time, were found to be free from worms in the spring."

"Some that were scalded in the spring however, were not benefited. The earth was left round the tree; so that the boiling water stood above the part affected, and proved of no use."

"One sad and weakly tree, have sensibly benefited the trees; and from a slight experience I have reason to hope that brim will be found useful."

"Among the useless remedies tried, I will name boring and plugging with sulphur."

"Sap-suckers acts like a charm on healthy peach trees; but on such have the yellow, it is like food in the stomach of a dyspeptic."

From the Journal of the American Silk Society.

Silk Culture.

COMPARATIVE VALUE OF DIFFERENT KINDS OF SILK WORMS.

GREEN B. SMITH, Esq. Sir,—In June last I tried an experiment with several varieties of cocoons, which may be interesting to the numerous readers of the Silk Journal. The silk worms were carefully fed and were perfectly healthy. I intended them for obtaining eggs for the year 1841, and was anxious to ascertain, by my own experience, which are the best varieties. The cocoons were carefully reeled on the Piedmontese reel, and the silk weighed with a small copper scales.

8 oz. of mammoth white cocoons, floss on, clean, finds not killed, in number 141, yielded 360 grains of reeled silk.

8 oz. of pure white pen-nut cocoons, floss on, in number 134, gave 339 grains of reeled silk.

8 oz. of various colored pen-nut cocoons, floss on, in number 148, gave 324 grains of reeled silk.

8 oz. of mammoth sulphur cocoons, floss on, in number 134, gave 327 grains of reeled silk.

I have not succeeded in keeping silk worm eggs in an ice-house, to hatch successive crops through the summer. Last winter I sent a quantity of mammoth sulphur silk worms to an ice house in Newbern. They were put up in a box, in the manner recommended by the Messrs. Carsons. In July, I had the box brought down, and spread the eggs on a feeding sheet—not one of them hatched out. I am informed the ice house was not filled until March; it is probable the hot weather in February started the hatching process, and then putting them on ice, in March, destroyed their vitality. Silk worm eggs intended for a succession of crops, in this latitude, should be put into the ice house in December and January.

I have raised about 30,000 multicolored mulberry trees this year, for feeding silk worms, and intend to give the silk business a fair trial before I give it up. My economy is 120 feet by 20, a single story. I cannot perceive why the raising of silk should not be as profitable in the United States as it is in France and Italy.

I am, very respectfully, your obed't servant.

JAMES MANNING.

Beaufort, N. C., Dec. 14, 1840.

For the New Genesee Farmer.
Pleasures and Profits of Agriculture.

MESSRS. EDITORS—In the last number of the Genesee Farmer the enquiry is made, whether Agriculture can be made profitable? Mr. Colman answers this question in the affirmative, so far as New England is concerned; but the inquiry still remains, what are the profits of agriculture in western New York, or rather, what may be the profits under a correct system of cultivation? The wealth of the farmer consists in the productive power of his soil, rather than in the extent of his territory. The farmer who possesses 100 or 1000 acres of unproductive land may be poor. The farmer who possesses 10 acres of land with power and skill to manage and cultivate it so as to supply all his wants, is rich.

An increased fertility of the soil is a source of profit too generally overlooked by the farmer. The great defect in our agriculture, so far as my knowledge extends, is want of system. Any system which shall embrace the two great principles of agriculture, namely, a careful attention to the making and application of manure, and a judicious rotation of crops, will ensure success. A general attention to these great principles would raise Western New York, with a soil naturally productive, to the very summit of agricultural prosperity, if at the same time proper attention be paid to the rearing the best breeds of animals. Of the system or course of rotation the best adapted to his soil and his circumstances, the farmer must be his own judge. An acre of good corn land, well manured and properly cultivated, will produce 80 bushels of corn in a season. After the corn crop is taken off, this acre will produce 20 bushels of wheat. If this acre shall be thoroughly stocked with clover and well plastered, and for two years pastured with cows and hogs, with what manure may be made from the land, it will completely preserve the fertility of the soil, and even increase it. Here we have a four year's course, which will most assuredly preserve the fertility of the soil. But the great question remains to be answered. What will be the result of this system, as it respects profit and loss? An answer to this inquiry must determine the course of the farmer. Two acres of clover on rich land will pasture two cows and four hogs in the best manner, through the season. The acre of corn stalks and the acre of wheat straw, with 40 bushels of corn in the ear, ground and fed with the stalks and the straw, will winter the same in the best possible manner. Fifteen bushels of ground with the cob, and making about 22 bushels of vander—this fed to each of the four hogs with the slops from the cows, will make 300 pork, or more—this would give 1200 lbs. pork at \$5 per cwt, would be \$60. The produce from the two cows in butter and cheese, or some of both, cannot be less than \$20 each, making \$40 for the two. The whole value of pork and dairy produce is \$100; the value of wheat from the acre, at one dollar per bushel is \$20—making the whole value of the produce of four acres \$120; \$50 will give one dollar for each day's labor, and pay all the necessary expenses, leaving \$70, or the interest of \$1000 for the use of four acres for one season, and the soil improving at least five per cent. per annum. Ten acres of good land cultivated after this manner, would afford a family of five persons all the necessities of life. Forty acres cultivated on this plan will pay the interest of \$10,000 annually, without any diminution of capital.

However visionary the results of this system may appear to many, it is founded on facts and principles which every intelligent farmer knows to be correct, and can most assuredly be realized by careful and persevering attention. I do not pretend that this system is the best which can be devised; there is such a variety of soil, climate and circumstances, as renders it impossible to devise any system which shall suit them

all. If any of your numerous correspondents will point out the defects of this system, or devise and recommend any other which shall be more profitable, or which shall do more to simplify the subject of agriculture and bring it within the means of all our common farmers, he will deserve well of his country, and be entitled to the character of a public benefactor.

Thus far I have written upon the profits of agriculture. So far as respects the pleasures of agriculture I would just observe, that the man who has a mind to adopt a system of husbandry embracing all its great principles, will find an employment more conducive to the health of his body and the peace of his mind, than any other; and, while he stands upon his own soil, and sees a variety of vegetable productions springing up and coming to maturity around him, cultivated by his own hand, if his heart is susceptible of grateful emotions, he will "look through nature up to nature's God," and adore that power that satters blessings around him in such pleasing variety and in such profuse abundance.

JESSE IVES.
Homcr, March 12th, 1811.

For the New Genesee Farmer.
On Cattle.

MESSRS. EDITORS—Having spent some time this spring in Genesee county for the purpose of purchasing cattle for the Eastern Market, and seeing an ardent desire prevailing among a considerable portion of your intelligent and enterprising farmers of improving their present stocks of cattle, I propose giving some general hints upon that subject—more especially to those however, who breed for the Eastern Market. For steers and working oxen, I prefer the Devon's to any other breed; as their fine horns and beautiful red color united with their quick, graceful motions, give those of the same weight, over other breeds, a price varying from \$10 to \$40 per pair more.

For cows, the Durhams stand unrivalled for their superior milking qualities; yet when we consider their color and coarseness of flesh and the quantity of food consumed, they are not so much beyond the Holderness, or a cross of the Durham and Devon and Holderness, which suit purchasers generally full as well as the Durham. I have frequently sold a Cherry Red cow when driving, for full as much as I could a Durham, where the blood of the Devon was evidently to be seen, from the fine color and horns taking the fancy of the purchaser. But I would not by any means wish to be understood to rank the Devon or Holderness in the same class with the Durham, but would either advise the cross, or the pure Durhams for cows. I would also suggest the evil which results from the too frequent practice of many of our farmers in over-feeding their bulls of pure bloods, of either kind mentioned, with grain, &c. &c., in order to make a great show to their neighbors, in the size of the animal, and also in publishing the weight, at 6, 12 and 18 months old, which is proof sufficient that they are not proper animals for sires. More especially where this practice has been persevered in for some two or three generations. It is generally known that the offspring of healthy men, who live and wade in luxury, hand down to their posterity a curse which will follow them through life, and which cannot be easily shaken off; and most certainly where two or three generations follow the practice of their ancestors, their bodily powers sinking into numerous complaints incident to the human family. So with the brute creation. And, depend upon it, if your rear calves from bulls that have had their digestive organs distended, the same will be handed down, and if not fed with the same bountiful hand, such stock will sink into comparative insignificance.

It would be much better for those raising stock to see that their bulls should be fed well; that is, have

as much good hay as they wish to eat, and kept as the old saying is, "heart whole." A few roots in winter, say given as often as once a week, would be advantageous perhaps, and advisable, as in winter all animals like a change from dry hay, making them most "heartly."

I noticed a small stock of very fine Devons in Sheldon, in this county: also a fine Devon bull, near Le Roy; also a fine herd of Durhams, the property of a Mr. Rensen, near Alexander, and the very fine Devon bull, *Red Jacket*, near Batavia, the property of a Mr. Cone, lately from Connecticut.

All the above named cattle I would particularly recommend to the farmers of Genesee county, as they have not, I think, been over-fed, any of them sufficiently to injure their stock. Mr. Cone assured me he had let his bull run with his other stock, none of which had had any food but hay and straw. This is the best way to produce fine stock. For what farmer is there that can feed and nurse his whole stock? and what farmer is there that wishes any stock of the kinds mentioned, but that will improve his old stock, on the same keeping? Rest assured that good blood will improve your stock, but great feed to particular animals should be condemned.

The Devons have proved themselves to the particular favorable attention of the farmers generally, (excepting, however, those who keep dairies,) for hardy constitution, standing the long winters, and keeping as well as any other stock on the same feed.

Yours,
 AN EASTERN DROVER.

Col. Sawyer's Berkshires.

To the Editors of the New Genesee Farmer:

In the last No. of your paper, (page 44,) E. Cornell asks, if the portraits given of Col. Sawyer's Berkshire pigs are correct likenesses?

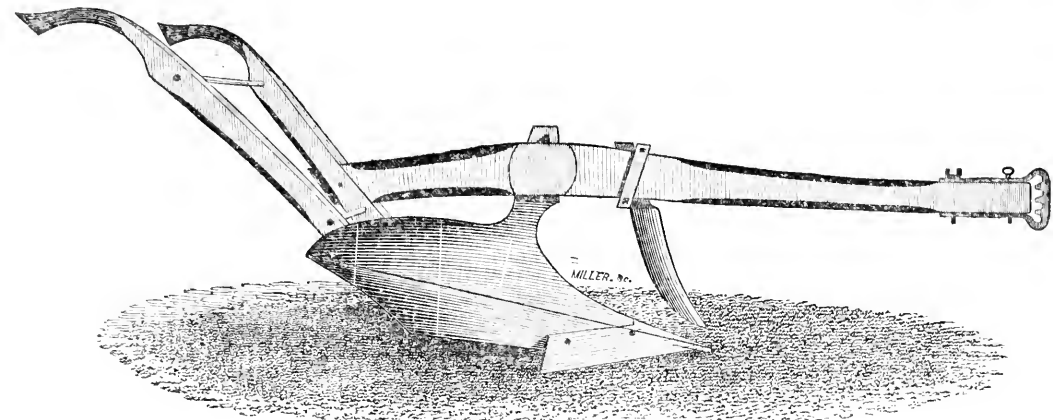
In my opinion they are not correct likenesses. The pictures of the two boars are much better likenesses than those of the sows, but are not exact. The portraits of the sows, although intended, no doubt, to be faithful copies of the almost perfect animals they purport to represent, I feel bound to say, are mere "fancy's sketches." To show the defects of the pictures, would require more time and space than I can now command; but the simplest observer will at once detect the want of symmetry, and of true anatomical, as well as (if I may so use the expression in this view of it) architectural proportions belonging to this prince of swine, the "Improved Berkshire" pig.

I was in Rochester a few days since, and paid a visit to Col. Sawyer's piggery, where I saw some very perfect specimens of thorough bred, and crosses of the Berkshire. His imported sow, now about two years old, and his boar "Young Prince," from the piggery of Mr. A. B. Allen, are probably as perfect specimens of the middle sized Berkshires as can be found in the country; and can only be excused in size, but perhaps not in symmetry, by a few individuals in the extensive piggery of Mr. Allen. Col. Sawyer breeds with great skill and judgment; and I hesitate not to say, that the originals of his Berkshire pigs far excel, in perfection of points and general excellence, the portraits that I have seen of them in your excellent paper.

Very respectfully yours,

L. F. A.

Buffalo.
Note. I have no desire in these remarks to criticize too severely, the portraits of animals that appear in, and add so much of interest to your valuable publication. The correct drawing of animals, is as much an art as that of copying faithfully, the human face; and this accomplishment is more rare than that of the other. From the absence of patronage in this country, few have chosen that branch of the profession, and it is from this cause alone, that so few faithful copies of animals are found.



WHITING'S WISCONSIN PLOUGH.

The inventor of this plough, by a few year's experience in the use of the common ploughs, on the prairies in the west, became fully convinced that the reason why earth so generally adheres to the mould board, is none other than the mould boards being so short and crooked as to form a hollow that catches the dirt instead of a plain flat surface, that would receive equal pressure as it passes through the sward. His next step was to construct one so as to avoid the difficulties common to other ploughs, in the least impairing its usefulness. And after taking one of the common ploughs, and using it in the prairie soil until such dirt as would naturally adhere to the board had become fully compressed, he examined it and found that a perfect straight line was formed the whole distance of the board, whether lengthwise or crosswise (as in the cut represented above) with a gradual wind to turn the sward. He consequently constructed one on this principle, and experience in its use has since taught him, as well as others, that it is the best and only principle that can be adopted, whether for prairie or other soils.

Many recommendations might be given, but the following are deemed sufficient.

The following certificate is from the Society of Shakers at Watervliet, accompanied by an order for four ploughs, and will show the estimation in which this plough is held by that intelligent society of people.

"We hereby certify that we have tried the Wisconsin plough, as exhibited to us for trial by Ebenezer G. Whiting, and we hesitate not in giving it the preference to any thing we have ever seen of the Plough kind, both for ease and utility.

CHAUNCEY COPLEY,
BENJAMIN TRAIN,

D. A. BUCKINGHAM,
WM. THRASHER.

The following is the report of the judges appointed by the Mechanics' Association of Western New York, held at Rochester, October, 1839, awarding a Diploma to the Wisconsin plough:

A Green Sward Plough—from E. G. Whiting. This article is constructed upon strict philosophical and mechanical principles, combining many advantages for tough, strong sward land, and those that are new and rusty, as well as those of ordinary kind, and cannot fail to be a favorite article.

C. DEWEY, L. B. LANGWORTHY, S. W. D. MOORE, Judges.

The following certificate is from Mr. Elias Cost, an extensive farmer at Oaks Corners, near Geneva, accompanied with an order for 6 ploughs:

OAKS CORNERS, December 15, 1840.

This is to certify that I bought a two horse plough last summer of E. G. Whiting, of Rochester, which plough I think is the best I ever used. In the first place it moves easier, and no plough can turn over the sod better. I therefore would recommend the plough to any one for a first rate article. ELIAS COST.
References for those who have never used the plough, and are unacquainted with the above recommendations:—HENRY VOSBURG, Gates; MASSFIELD PARSONS, Brighton; OLIVER CULVER, do.; RODNEY LYMAN, Rochester; GEO. WHITNEY, do.; PETER BURSEE, Pittsford; ISAAC MOORE, Brighton; GEORGE BROOKS, do.; JULIUS CHAPMAN, Riga.

To avoid difficulty for those who live at a distance, patterns for points will be furnished on application.

The above plough is manufactured and sold at A. J. LANGWORTHY'S Eagle Furnace ware house, Rochester; also at No 1 Buffalo-st. west end of the bridge, by the Patentee, or SAMUEL RICHARDSON, Agent.

N. B. Patterns for the various sizes, furnished by the patentee. Also Castings by the ton to Plough-wooders.

E. G. WHITING.

WHITING'S PLOUGH.

Messrs. Editors.—In the December No. of your paper, I observe an article headed "Important Ploughing Match and Trial of Ploughs," purporting to have been held at Worcester by the Mass. Agricultural Society; and as that report is calculated to convey an erroneous impression, and unjustly prejudice the minds of the community against my plough, you will greatly oblige me, and subserve the cause of justice, by publishing the following remarks with the annexed challenge.

I am the inventor of the "Whiting's Wisconsin plough," mentioned in that report, and was present at the exhibition; but as I had understood it was to be a true exhibition, and did not go with the intention of competition, but merely to witness the exhibition and at the draught of my plough; but being invited to try my plough in for trial with the others, I cheerfully did so, although without the least preparation—so necessary on such an occasion, and used to so good advantage by others. I will not now take up your time and space to detail what I deem the errors and unfairness of the report of that trial, but will do so hereafter. I write for the present to say, that disinterested persons who were present at the exhibition, gave my plough a decided preference, and together with hundreds

who are using my plough in this State, agree in declaring that the report is both unfair and untrue; and if cattle had the gift of speech, there would be more than human testimony to the same point.

Those who are in the habit of using my plough, say it runs easier than any other plough now in use in Western New York, doing equal execution; and no one can persuade them that the above mentioned report is correct, or any where near correct. In order to bring the matter to a test; however, I hereby offer a reward of

ONE HUNDRED DOLLARS,
for any plough, manufactured in Massachusetts, that will do as good work, and run (not 100 per cent., but even) one per cent easier than mine; and, in order that distance may not prevent a trial, I will meet any person half way, or thereabouts.

Address, E. G. WHITING.
Rochester, N. Y. March 29, 1841.

"The Northern Light."

This is the title of a large Monthly paper, just commenced at Albany, which bids fair to become very popular; and, judging from the reputation of the conductors, and the appearance of the 1st No. now before us, we can safely recommend it to such of our readers as desire a cheap, instructive, and useful paper, of un-

exceptionable moral character. It is published in double quarto form (16 pages) suitable for binding—Terms \$1 per year in advance. The following is an extract from the prospectus:—

"The principal object of the publication is to diffuse information on subjects of practical usefulness. For the more effectual accomplishment of this object, it is proposed to give it a popular shape and to afford it at so low a rate as to place it within the reach of all classes of readers. In this respect, it will bear a strong analogy to some of the periodical publications put forth in Europe, by Societies for the Diffusion of Useful Knowledge. In like manner, it will be conducted by an association of gentlemen, whose co-operation has been secured by the proprietors. The association consists of the following persons: JOHN A. DIX, T. ROMEY BRICK, GADSDEN HAWLEY, AMOS DEAN, THOMAS W. OLCOTT, and EDWARD C. DELAVAN; and the immediate superintendence and management of the publication will be assumed by the individual first named. The character of these gentlemen, and the fact that they may be considered as representing a variety of interests, political and professional, afford to the public the highest security that the objects of the publication will be kept steadily and faithfully in view.

The publication will embrace four distinct branches of inquiry and intelligence:
1st. POLITICAL ECONOMY;
2d. AGRICULTURE;
3d. LITERARY & SCIENTIFIC MISCELLANY;
4th. GENERAL INTELLIGENCE."

For the New Genesee Farmer.

The Past Winter.

MESSRS. EDITORS.—The winter which has just closed, has been peculiar for the mildness of some part of it. The weather has been quite uniform, though some severe changes have taken place. The barometer has shown no great variations in the weight of the atmosphere.

The mean temp. of Dec. 1838 was	22°	76.
“ “ “ “ “ “ “ “ “ “ “ “ “ “	1839	28 41.
“ “ “ “ “ “ “ “ “ “ “ “ “ “	1840	25 14.
“ “ “ “ “ “ “ “ “ “ “ “ “ “	1839	25 51.
“ “ “ “ “ “ “ “ “ “ “ “ “ “	1840	19 32.
“ “ “ “ “ “ “ “ “ “ “ “ “ “	1841	27 02.
“ “ “ “ “ “ “ “ “ “ “ “ “ “	1839	27 78.
“ “ “ “ “ “ “ “ “ “ “ “ “ “	1840	32 08.
“ “ “ “ “ “ “ “ “ “ “ “ “ “	1841	23 28.
Mean of 3 winter months just ended,	25	20.
for 1840	26	61.
“ 1839	25	69.

The mean temperature of February, 1840, was uncommonly high, and made the mean of the winter somewhat above that of this year. The influence of that warm month was felt through the spring, in the preparation given for the early starting of vegetables.

In December, 1840, there fell in the last half of the month, about 24 inches of snow, and near a foot of it on the 26th and 27th, forming the first sleighing of any consequence.

On Jan 3, 1841, the temperature was 1° below zero.

The next half was warm; but on the 18th the temperature fell to zero, and the next day was only 3 above, while the rest of the month was warm. At the beginning of this month, snow fell 6 inches, and the sleighing was good till the 7th, when the whole was carried away by a sudden thaw, and on the 9th the ice broke up in the Genesee and passed over the Falls. Little snow fell the last half of the month, and the roads were smooth and fine for carriages.

February 12, 1840, the temperature was at zero, and from the 10th to the 18th was a very cold week, with constant and brisk N. W. winds; and the last half of the month was considerably colder than the same part of January. The whole month was 5° colder than that of January. Several inches of snow fell in the month, but the sleighing was at no time good. So much for the winter.

The first week of March has now passed, and has been only one-tenth of a degree warmer than the first week of February. On the 7th snow fell 14 inches deep, and the sleighing is now excellent. The present cold offers few indications of an early spring.

Rochester, March 9, 1841. C DEWEY.

Vegetable Oyster Pudding.

“A lady of no small standing,” as our Wisconsin friend says, has furnished us the following, and were we at liberty to append her name, we are sure it would be a sufficient voucher for the excellency of her dish.

“Having a great deal of salsify or vegetable oyster, I tried many ways of cooking it; at last I thought of making a pudding of it—and it is very nice indeed—fit for Queen Victoria.

“Take 1 pint of sweet cream; 3 eggs; sugar enough to sweeten it, probably 3 large spoonfuls; a tea spoon of salt; a spoonful of bread crumbs; a teaspoon of grated salsify or vegetable oyster; and a quarter of a nutmeg. Make some pie-crust, line a dish, and bake it about half an hour.”

Regretting that we cannot give the name of the inventor of the above famous dish, we recommend it to special notice; and hope in future that none of our distinguished female friends will hide their names under a bushel, though it may be no (additional) honor to them, even if appended to so fine a dish as the above.

A Scene in Asia Minor.

“Know ye the land where the cypress and myrtle
Are rubbied of deeds that are done in their clime?
Where the rage of the culture, the love of the mitre,
Now melt into sorrow, now madden to crime?
Know ye the land of the cedar and vine,
Where the flowers ever blossom, the fountains ever shine?
Where the light wings of zephyr, oppressed with perfume,
Wax faint over the gardens of Gul in her bloom?
Where the citron and olive are fairest of fruit
And the voice of the nightingale never is mute?
Where the fountains of earth, and the fountains of the sky,
In color though varied, in beauty may vie,
And the purple of ocean is deepest in dye?
Where the virgins are soft as the roses they twine
And all but the spirit of man, is divine?”

We copy the following sketch of a scene in Asia Minor, for such of our readers as are fond of flowers, and who have not read the “Letters from the Old World,” by a Lady of New York. It occurred on the wild route between the Gulf of Mæri and Smyrna, about latitude 37°, but if we make the usual allowance of 10 or 12 degrees on account of the difference in physical climate on this side of the Atlantic, we shall find no corresponding temperature in winter, nearer than the middle of Florida.

It is a sad reflection that lands fertile enough for such productions, and under so fine a sky, should be entirely deserted by the husbandman; and all this on account of the oppressor,—from the savage bandit up to “the most unreluctant and remorseless despotism that the world has ever seen.”

The party, of which this lady was one, carried their own tents and provisions, a cook, &c. &c., and encamped wherever it seemed to suit them best. Our extract begins with the morning of the third day after their departure from Mæri.

“The next morning a most glorious scene presented itself to us, which we had not observed in the dusk of the evening before. We were in the midst of a paradise of flowers of such magnificent appearance, unusual size, and profusion of quantity, that were I to relate to you a tale of what I saw of these splendid productions of nature, you might think I was drawing largely on my imagination. Were I to tell you that I had seen *Oleander-trees* twenty-five feet in height, you might accuse me of “drawing a bow” of equal dimensions; nevertheless such is the fact; for not willing to trust to our senses, nor having the means of making a trigonometrical measurement of the elevation while standing, we caused one to be cut down, and found it to be of the height before stated, and the body of it six inches in diameter; about ten feet of the latter we have brought away, with the intention of taking it home with us. This was only one of many, many thousands which we could see at one glance.

“Very few stood singly, but as far as the eye could reach, we could see their bordering each side of a stream of water, as in Palestine, only of far greater dimensions and in greater numbers.

“In the latter country, we only saw them near streams of water, but here we find them also in the midst of the plains. But the most extraordinary and almost incredible thing for you to realize from my description is this:—Here was a plain fifteen miles in circumference, which seemed more like a land of enchantment than any thing that one can realize from the limited observations one is in the habit of making in countries where Flora is less prodigal of her favors. It seemed to me as if I was in a land where giants had been amusing themselves in arranging and cultivating parterres by the square mile, instead of by the square foot, as we do.

“Distributed over this plain in all directions were groves of *Oleanders*, from ten to one thousand feet in diameter. At the outer extremities of these circles and ovals, the trees were not more than one foot in height, and in the centre they were of the loftiest dimensions.

“The smaller plots resembled beautiful cones, while the larger ones appeared like mounds of roses, so entirely were they covered with flowers. The leaves of the larger trees measured fourteen inches in length by two and a half in diameter.

“So delighted were we with this grand Floral display, that we circled our horses round and round them

* Blackwood.

in cactuses, plucking handfuls of flowers, and streaming them on the verdant carpet beneath our feet.

“The day began to waste away, and we had not yet made a mile of progress on our road; and our guide informed us that we should find subjects enough of this nature to engage our attention on every side of us during the whole day, if we proceeded onward. We then took up our line of march, and other scenes of a far more pleasing and not less extraordinary nature presented themselves to our astonished gaze, during the remainder of our day’s journey.

“We rode through forests of flowering trees in full blossom, of such rare beauty and splendid intermixture of species and colors, and of such overpowering fragrance, that we really enjoyed ourselves in the midst of “the gardens of Gul in her bloom.”

“Here were the *Panagæa*, with its incipient blossom, its fully expanded bright scarlet flower, and beautiful fruit; the *Myrtle* in full bloom; *Lime* and *Orange* trees in blossom and fruit, with many others.

“What are with us but mere shrubs, cultivated with the greatest care, and demanding constant attention, are here literally standing trees of large dimensions. Around the bodies of these are seen a great variety of flowering creepers, *Honeysuckles*, *Jessamines*, &c. &c., which reaching to the utmost branches, hang in festoons from tree to tree, so thickly that sometimes it was with much difficulty we could make our way through them.

“Our attention was attracted to another singular appearance in the vegetable kingdom: we rode to it, and found it to be a vast field of *Heath* and *Esperan* plants of so great a size that we could not at first believe our eyes, that what we behold was the real Scotch *Heather* fifteen feet in height with bodies measuring six and nine inches in circumference of solid wood. But upon close observation we found we were not in error.”

“The whole field which was of great extent, was covered with blossoms. We saw many other fields of the same kind afterward.

“There was too much enchantment about all this scene for us to hasten from it, so we encamped early in the day in order quietly to luxuriate on the beauties of this Eden.”

Cheap and Durable Fences.

MESSRS. EDITORS.—As it will soon be time to repair fences, my plan is, where a fence is to stand without being removed, I stake out the ground, then throw two furrows towards each other, within about eight inches of meeting, then plough two more the same way and lay them on the top of the others, then plough the loose earth where the last were taken, and shovel it on the ridge and raise it about three feet high, between two ditches. Then lay a strait fence on said ridge, by placing the bottom rails on stones or wood; cut your connecting blocks of wood about two feet long and lay up the fence five or six rails high. Then stick stakes without sharpening, in the outer edge of the ditches and lay on heavy rails for riders, and no cattle will jump or throw it down. By this method you can build a fence that will stop grease or pigs, will drain the water from the field, no bushes will grow near it, the bottom rails will last much longer, and it is not liable to blow down.

Sliding Gates for Bars.

To obviate the inconveniences of common bars, take two 4 inch scantling, 5 or 6 feet long, and frame the end of the bars into them, take up your bar posts and throw them away, place two stakes or posts near where your bar posts stood, the thickness of the bars apart, and two at the other end four inches apart, to receive the frame and keep it perpendicular; mortise out at the bottom of each post so as to receive 4 inch rollers; bed two slabs down level with the surface of the ground, one at the end of the other, and your gate is done. No longer time is required to make such a frame than to make posts and bars, and it is

* In London’s Encyclopedia of Plants, no *British Heath* is marked more than ten feet high; but *Erica mediterranea* is marked four feet; and *E. arborea*, also from the South of Europe is marked five feet high. Our travelers may have been very correct in their botanical examinations, but in a genus of many species (and *Erica* has 300) it is sometimes difficult to avoid mistakes.

very easy to open and shut. It is preferable to a swing gate in the winter, in a drifted snow. I have adopted the plan many years and find it answers well.

Protecting Fruit Trees.

Build a crib round them, (drawing in towards the top,) of any split firewood; three feet long will answer the purpose, and the wood will not be lost; place something at the top to keep the trees from chafing. Such a frame will keep sheep or cattle from injuring the trees. By keeping the land loose, the hot sun from injuring the bark, and the wind from racking the trees, they will grow twice as fast.

J. SPRAGUE.

Chataqua Co. March 1840.

For the New Genesee Farmer.

Merino Sheep.

In answer to "A Subscriber," who asks information respecting the Merino Sheep imported from Spain by Col. Humphrey, I take the liberty of extracting the following from an Essay on Sheep, by Robert K. Livingston, L. L. D., President of the Society for the Promotion of Useful Arts, &c., published, N. Y. 1809.

"To Humphrey and Livingston, their country is indebted for that breed of sheep, which bears the material for the finest fabrics. The former by his poetry, has placed himself among the literary worthies of his time, and by the latter has rendered himself more worthy of pastoral celebration than any swain of Arcadia. The latter had by his proficiency in the law, shown himself an upright and impartial Judge; and by this act has proved how deserving he was of the honor of the wool-sack.

The first animals of this race, were two pair bought in France by Dr. Livingston, and sent to New York under the care of one of his own servants, where they arrived in the spring of 1802. Afterwards he obtained permission to ship others, chosen from the highest bred flocks in that kingdom, by permission of the minister of the home department. All these derived their pedigree from the stock given by the Spanish monarch to Louis XIV. in 1768. This royal donation consisted of four hundred rams and ewes, assorted from the best collections beyond the Pyramids; and were conducted to their new residence under the care of Spanish shepherds. Afterwards, by the treaty of Basle, five thousand Spanish sheep were introduced by the government; and out of these animal flocks was formed, by cullings and pickings, the famous flock of Rambouillet. Mr. Humphreys obtained his sheep direct from Spain. A numerous flock arrived in good health at New York—the particulars of which we insert from the report made by Eleazer Goodrich, Esq. to the General Assembly of Connecticut, in October, 1808. This gentleman and his colleague of the committee, state—"That they have carefully investigated the facts and connected the various subjects referred to them; and take pleasure in observing, that Col. Humphreys, while discharging the high and important duties of his public station, availed himself of the facilities which his character and acquaintance in the capitals of Spain and Portugal afforded; and in the year 1806, secured eight hundred and two, extracted from Spain a chosen flock of one hundred sheep of the Merino race.

[Here follows a statement of the committee's of the results of their examination of these sheep, proving their distinguished excellence, and adaptation to the climate of this country, which general experience has since fully corroborated. We deem it therefore unnecessary to publish the statement.—Eus.]

Spanish wool was first introduced into England in the reign of Henry II, at this time the best English superine broad cloths are chiefly made of Spanish wool.

There are two kinds of sheep in Spain distinguished as the *Migratory*, and the *Stationary* sheep;—the former are Merinos—they afford the most valuable fleeces; and this superiority has been attributed to their being exposed to a more equal temperature, ranging upon the northern mountains during summer, and pasturing during winter, on the plains and valleys of the S.uth. Mr. Townsend states, that the wool of the Merino sheep is worth about twelve pence a pound, while that of the Stationary fleeces sells only for sixpence; and that every sheep is reckoned to yield a clear

profit of ten pence to the proprietor, after all expenses are discharged.

I am yours, &c.

E. HUMPHREYS.

Durham Cows, as Milkers.

The following remarks were made by Mr. Colman during a debate on the subject of Cattle, at an Agricultural Meeting in Boston, a few weeks since:—

"Mr. Colman had not intended to enter upon this discussion, but he felt it due to his official relation to the farmers of Massachusetts, to say that he had and the pleasure of seeing improved Durham stock of the Messrs. Lathrops, of South Hadley, and he thought them eminently beautiful, and evincing great skill and care in their management, on the part of those gentlemen. He had seen many of the imported animals throughout the country; and one of the herds imported for the Ohio Company, which he saw on their way, was truly splendid, and in beauty and perfection of form, far surpassed any thing which he had ever witnessed.

He must, however, in justice, add, that he yet wanted the proof of the Durham Short Horns being the best stock for our dairies. Seven of the race which he had owned, some full and others half-blood, had been inferior as milkers. The quantity of milk given by many of the animals which he had seen, was remarkable; the quality, in general, inferior; though he had found some exceptions, he believed, were accidental.

The Cheshire farmers, who were as distinguished as any in the country or in any country for the produce of their cheese dairies, preferred the native stock. From a dairy of eighteen cows, an average of 633 pounds new milk cheese to a cow, in a year, had been obtained. He had been challenged in writing and conversation the owners of the Short Horns in the country to prove, by actual experiment, the dairy properties of this stock; and he would furnish of a hundred cows of our native stock, which had made from twelve to fourteen pounds of butter per week, through the season. He was far from having any prejudices against the Improved Durhams. He was an enthusiastic admirer of them; but he wanted their dairy properties tested by actual experiment. A very distinguished English farmer, Mr. Shirrer, who had made the tour of this country, expressed his regret at their introduction, and pronounced them in his book the poorest dairy stock in England. We could not be said to have formed any distinction among ourselves, excepting the trials made by Mr. Jagers, and a long continued improvement carried on in reference to milk cows, in another part of the State, upon which he had reported. Much, undoubtedly, yet remains to be done, but nothing in this respect can be effected but by skill, extreme accuracy of observation, and long perseverance.

He thought the Durhams not well adapted to the scanty pastures and negligent habits of many of our farmers. All high bred animals require particular care and the most liberal feed. Two of the finest cows ever raised in the country were of this stock. One, it is believed, a full blood, from Greenland, N. H., weighing over 3400 pounds, live weight; and one a half blood, raised in Claremont, N. H., and sent year before last to England, for exhibition. His live weight was said to be 3700 pounds; and he was pronounced in England, by the best judges of stock, as unrivalled for weight and thrift, and eminently well formed.

The best breeds would soon run out if negligently or severely treated. This race were undoubtedly well suited to the rich pastures and abundant products of the West of Kentucky and Ohio. There they would flourish. What might be done for our own stock by more liberal keeping, was yet to be seen. He had known a calf from a native cow, at four months old, to weigh nearly 40 pounds; and another, at five months old, to weigh 600 pounds. If the improved Durham stock should prove the best for us, and he kept his mind on this subject open to conviction, we could at once avail ourselves of the distinguished improvements of half a century's skill and toil and expense, so liberally bestowed in England. At any rate, the improvements which they had accomplished in England, so obvious and impressive to the most careless observer, read a most important lesson to us, and showed what might be done by skill and care, by judicious selection, by steady perseverance in a regular system, and by liberal keeping; and presented, at the same time, the most powerful motives to exertion and enterprise in a branch of husbandry, acknowledged by all to be of the first importance."

Different Soils.

"Soils. Every farmer should have some general knowledge of soils, and be acquainted with the nature of plants, so as to adopt those he cultivates to the soil of his farm. This is an important branch of agricultural knowledge; every plant will flourish best in that which is congenial with its nature; and if farmers were acquainted with the art of adopting plants to soils, much manure might be saved; some soils require little or no manure to grow some kinds of plants, whereas, to grow other kinds of plants upon the same soil, requires much manure. The best index to the nature of soils, are the plants that grow upon it; thus, the chemist himself is in his power to determine the nature of soils without this natural index, yet every farmer who knows the timber, underbrush, and plants which a soil spontaneously produces, decides at once upon its value for cultivation.

The principal soils are *silicea*, sand, or earth of fine; *argu*, or calcareous earth; *aluminu*, or clay; *arguesia*, a mineral substance; and the fine blended vegetable and animal matters in a decomposing or decomposed state, and saline, acid, or alkaline combination.

The nature of *silicea*, or sand, is dry and hot—*aluminu*, or clay, cold and wet—a proper mixture of the two, improve both—all experience shows that manuring sandy lands with clay, or clay lands with sand, is best for grain or pulse. But it is not the best natural soil that the farmer ought to consider, but the depth of it. The farmer should never lose sight of these facts. For if the richest soil is from four to six miles deep, and lies on a cold, wet clay, or stone, it will not be as fruitful as a poorer soil, that is deeper, or lies upon a better stratum. It is now generally agreed, that a gravel, if not too compact, is the best substratum to make land prolific.

We shall now attempt a plain description of the different kinds of soils, by noticing their quality. We shall begin with the best kinds of loams and natural earths: these are either of a light brown, or hazel color; hence, sometimes called "*hazel loams*." They cut smooth and tolerable easy, without adhering much either to the spade or to the plough-share; and are light, firm, (crumbling,) and fall into small clods, without cracking in dry weather, or turning into tough mortar when very wet.

The next best are dark grey, or sometimes called "*russel mould*." But the worst of all natural soils are the light and dark colored. These clays may all be known by the scrub. There is, however, another, and perhaps equally sure a test, of good soils, as that by sight—*smelling* and *feeling*. The best kinds of clay emit a pleasant scent on being dug, or ploughed up, especially after rain; and being a just proportion of sand and clay intimately blended, or mixed, will not stick much to the fingers on handling. We would however, remark, that the best soils in the world may be impoverished, and completely worn out by an unjudicious succession of crops, and especially if the ploughings are not frequently repeated before the seed is sown.

As said before, plants are a good index to soils; for we find, if we examine trunks of lands not cultivated, we may also find that time has adapted different kinds of plants to most of the distinguishable varieties of soils; and though some belong to one man, from some cause or other, be found on lands of a different quality, they seldom thrive or perfect their seeds so as to become general. The great care of the farmer, ought, therefore to be, by proper mixtures, to reduce his land to that state and temperament, in which the extremes of hot and cold, wet and dry, are best corrected by each other; to give them every possible advantage flowing from the benign influence of sun and air; and to adopt such kinds of plants as they afford in this state, the greatest nourishment to; and to renew their fertility by a judicious allowance of the most proper manures. When these things are done, there are few spots so unfruitful, but which will repay his expenses and labor, with a plentiful increase. But without these, the best of land will, in time, become a barren waste, or produce little but weeds."—*Practical Farmer*.

Prizing for Luxuries.—The Packet Ship *Albany*, from New York for Havre, took out \$150,000 in specie. So much for an article, that night as well be produced in this country, employing our own labor and capital, and furnishing a market at home for our agricultural productions.

The annual amount of cheese sold in Cincinnati, is estimated at 900 tons for the last six years.

THE GENEESEE FARMER

AND GARDENER'S JOURNAL

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Take Particular Notice.

✓ No subscription for this paper is received for less than one year, and all must commence with the 1st No. ✓ Volume I, stitched in a cover with index, &c., can still furnish—price, 50 cts. ✓ No commission, or deduction of price can be allowed Agents if the money sent is more than 5 per cent. discount; if over 10 per cent. discount, the money will be returned. (Michigan is 25, and Indiana 15.) ✓ Subscribers who wish to change the direction, or send by instructions concerning their papers, are requested to do through their postmasters, or pay the postage. Those who send us unpaid orders, which are of little or no benefit, us, must not complain if they do not receive attention. ✓ Our friends will please remember that this is a very dry time with us, and letters are sometimes so numerous, that a little delay on our part is unavoidable, especially as Mr. Bateham's health is not very good.

Hints for the Month.

This is the month for the farmer to be wide awake. There is "oceans" of work to do, as our friend down east would say, and the farmer must not relax his forces, if he would plough through this ocean by the end of the month—something more will be required than ploughing the soil, all important as this may be. As good and efficient teams are of the first consequence, let all your horses and oxen, be very carefully taken care of;—well and regularly fed,—well and regularly watered,—and regularly, but moderately worked. A bushel of oats, well fed, will do more good than two bushels, fed improperly.

Then, having got your teams, all in good condition, and your ploughs and other implements, all of the best kinds, and in fine order, you can begin with some satisfaction.

Plough well—if the ground be already broken, plough very narrow slices—it will look much better, and be much better for it.

Let all crops be well put in.

Apply all your manure—suffer none to be idle—suffer none to waste.

Plant corn early. To keep off the crows, warm the seed before planting by hot water, then pour on a little tar, which will finely coat it while thus warm, then roll it in air-slacked lime. This is experience. The crows will "beg off."

Plant the rows perfectly straight. Then the cultivator will run well between.

Put in plenty of root crops—carrots—sugar beets, mangel wurtzel—turnips,—and so forth. They make fat cattle—and a fat dairy. How many there are in this region, who would have been glad a few days ago to have had an odd hundred or two of bushels, to have filled the mouths of their hungry and starving cattle, in the absence of the last morsel of hay. O, one word about carrots—get seed of the *new white kind*—they are much more productive—and much easier harvested—we have tried them.

Get your ground ready for rut bays by manuring, and then ploughing and harrowing repeatedly between this and the time they are planted. This puts the soil in first rate order—kills weeds—and lessens subsequent labor exceedingly.

Gardening for May.

The season is remarkably backward, and but little if any work has yet been done in gardens in this vicinity. The weather has been quite cold during the past month, but there is now some prospect of its being warmer, and danger from frosts is mostly over. Let no time be lost in sowing or planting the early hardy kinds of vegetables, as mentioned last month. This done, and all danger from frost being over, proceed to put in the more tender kinds, and such as are intended for fall and winter use. For the benefit of new subscribers, and to refresh the memory of old ones, we repeat some of the directions given for May last year.

Beans.—The early kinds may be planted early in the month, and the late kinds about the 10th or 15th. The Lima Beans require a warm, sandy soil, and should not be sown during wet or cold weather, as they are liable to rot.

Beets, Carrots, Parsnips, Onions, &c., may now be sown for the main crop. Those sown last month should be thinned out as soon as the plants will permit. Stir the ground frequently, and be careful to keep it clear from weeds—now is the time to kill them easily, and a few days' neglect may spoil the crop.

Broccoli, Cauliflower, and Cabbage plants, raised in hot beds, if of sufficient size, should be transplanted into the open ground early in the month. Take them up carefully, and immediately immerse the roots in mud, to prevent their drying; this renders it unnecessary as to defer the operation till a rainy day. The early York and other small cabbages, need not be set

more than half the distance apart of the Drumhead and the Cauliflower. These ought to be three feet apart, and on way rich and. The Purple Cape Broccoli is an excellent vegetable, and easily raised. The seed may be sown in the open ground; only in May, and if the soil and cultivation are good, they will head finely in autumn. Winter cabbage may also be sown now.

Cauliflower seed may also be sown in the open ground early this month; and if a favorable season, it will do well.

Celery if sown early in a hot-bed, will now need to be transplanted in a nursery bed, where it can gain size and strength, and be fit for setting in trenches next month. Set the plants four inches apart and water frequently. Shade from hot sun till rooted.

Tomato, Egg Plant, and Pepper, should be removed from the hot-bed about the middle of the month. If the plants are getting large, they may be removed earlier, but must be protected during cold and frosty nights. Egg Plants and Peppers require rich land; a light, sandy soil is best for Tomatoes—if it is rich and moist they run too much to vine, and do not bear well.

Turnips.—Sow a little of the Early White Flat Dutch Turnip, as soon as may be, and if the soil is free from worms they may do well. Sow again the latter part of the month.

Kidneys may be sown now, and repeatedly during spring and summer.

Lettuce should also be sown often. Transplant some of the earliest sown, in order to have fine large heads for summer.

Pars.—Sow Marrowfat, and other large kinds repeatedly, during this and next month.

Indian Corn.—Plant some of the early golden variety as soon as possible—if it escapes the frost all is well. Sow some Tu-carora and Sweet Corn as early as danger from frost will permit; and again about the last of the month.

Melons, Cucumbers, and Squashes.—Plant early in the month, for early use, and about the 15th for the main crop. If planted on highly manured ridges or mounds, they will bear much better than in the ordinary way, especially if the ground be cold and heavy.

Flower Seeds may now be sown in the open ground. Those forwarded in hot beds should be transplanted about the middle of the month.

Watering.—Do not neglect watering in dry weather—it should be done in the evening, so that the water may sink in—not dry up.

Agents for the Rochester Seed Store.

A FULL assortment of seeds, put up at the Rochester Seed Store, may be found at each of the following places. Subscribers will also be received there for the "New Genesee Farmer and Gardener's Journal."

Buffalo,	W. & G. Brant.
Lockport,	S. H. Marks & Co.
Albion,	C. Swan
Brookport,	George Allen.
Scottsville,	Andrew & Garbat
Le Roy,	Thomas & Morgan.
Elmira,	J. V. Verplanck.
Attica,	R. N. Wells.
Warsaw,	E. B. Biscom.
Perry,	L. B. Parsons & Son.
Mount Morris,	C. Freer.
Nunda,	W. M. Chipman.
Genesee,	J. E. & G. W. Wyman
Canandigua,	J. H. Hayes.
York,	R. H. French.
Geneva,	A. Heming
Waterloo,	Alvan Berek.
Amherst,	T. M. Hunt.
Edinboro,	Hot & May.
Syracuse,	T. B. Fitch & Co.
Utica,	J. E. Warner.
Oswego,	R. H. Canfield.
Hamilton,	J. A. Mott.
Cooperstown,	S. Doubleday.

BATEHAM & CROSMAN, Rochester Seed Store, March 1.

"Wonders of Horticulture."

An exchange paper credits the *Gardener's Gazette* for the following extract, which we copy for the purpose of comment:—

"Few would suppose that the peach (from which branched the nectarine) had its origin in the wild (1) lime. That favorite edible, celery, springs from a reuk and aerid root, denominated snailage, which grows in all sides of ditches, and in the neighborhood of the sea. The hazelant was the ancestor of the filbert and the cob-nut, while the luscious plum (2) can claim no higher a source than the sloe. From the same [sour ?] crab (3) issues the golden pippen."

(1) What is the wild lime? In England, where we suppose this article was written, the linden (*Tilia*) is called the lime tree; and hence Cowper in enumerating their forest trees, mentions

—the lime at dewy eve
Diffusing odors—

but we can hardly think the *Gazetteer* could imagine there was much resemblance between a basswood and a peach tree. So we turn to the *Citrus limetta* (the lime of which peach is made), but find ourselves no nearer to a solution of the difficulty. The lime is a berry of 9 cells—the peach a fleshy ring with a hard stone in the middle. Such a change would be transmutation indeed! and Botany would be no longer a science; but such a change never happened.

(2) The plum (*Prunus domestica*) is a distinct species from the sloe (*P. spinosa*); and neither Ray, Linnæus, nor any other botanist of whom we have any knowledge, has ever imagined them to be nearer akin. It is absurd to talk of one species springing from another.

(3) On this point, the *Gazetteer* has authority on his side; but we believe nevertheless that he is in an error. Ry considered the English crab-tree or wilding, a distinct species from the cultivated apple; and we think no good reason can be given by modern botanists for confounding them together. The permanent characters of these two trees, (as given by Persoon and Gray), show that they differ more than several other species of the same genus which are admitted to be distinct by all botanists. We enjoin those characters:—

CRAB-TREE. * *Leaves* ovate, acute, villous underneath; *styles* bald; *fruit* the size of a chestnut, acerb, astringent, astringent.

APPLE-TREE. *Leaves* ovate-oblong, acuminate, glabrous; *styles* villous; *fruit* more or less sweet.

Now if we compare these differences with the differences between some other species, we shall find them very full and ample. For instance—*Pyrus Polleceia* differs from the common pear (*P. communis*) in having down on the under side of its leaves; while the True service tree (*P. domestica*) is specifically distinguished from the Mountain ash (*P. aucuparia*) by its leaves being villous underneath, while those of the latter are smooth on both sides.

It may be proper to explain that all seedlings of the apple are called *wildings* in some parts of England; but such is not the wilding whose character we have given, and which Sir Humphrey Davy says "always produces trees of the same kind—all bearing sour and diminutive fruit."

To distinguish varieties from species sometimes requires more expanded views than botanists have always taken. They may be minutely correct on many points, and yet fail to grasp the most important feature. Does a plant spread into many varieties like the apple—then there is a danger that some of these may be exalted into species; but if it differs essentially in its leaves, its blossoms, and its fruit; and pertinaciously adheres to its primitive character like the English

Crab-tree, without any approach towards any other kind,—then we may be satisfied it is not a variety but an original species.

The triumphs of Horticulture are surely sufficient without straining after wonders, and traversing the regions of romance.

Cultivation of Dahlias—Bone Dust.

I have been a cultivator of Dahlias for several years; but it has only been within the two past seasons that I have succeeded to my entire satisfaction. My usual mode of preparing the ground, was to dig holes of sufficient size, and then to fill up with mould and rotted manure, properly mixed. Under this treatment a portion of the plants would flower early; and others, of a later habit, not until autumn. The early flowering ones were apt to become exhausted, and to produce a very scanty display in the fall; while the later varieties were seldom covered with a free bloom. On the whole, my success was indifferent.

For the two past seasons, however, my success has been complete. I had the ground prepared as formerly; and in addition to the manure, I made use of a small quantity of horn shavings or bone dust—about a pint or a quart to each hill—well incorporated with the soil and manure. The growth of the plants was most luxuriant from the time of sprouting. They attained a very great size without ever being watered, and were covered with a profusion of flowers from mid-summer until frost. There was also a corresponding development of the roots. Many of the branches, taken as they grew, would nearly fill a half bushel measure.

I have found the bone dust to be an excellent manure for all tuberculous rooted plants. Nothing that I have ever tried has produced me such crops of Irish Potatoes. Tap-rooted vegetables are also much improved by it,—as the beet, parsnip, salsify, carrot, &c. It is no less valuable for all the cabbage family, including turnips.

Virginia, 3 mo. 20, 1841.

T. S. P.

Portraits of Animals.

Few appear to be aware of the great importance of the most rigid exactness in delineating animals. The face of a human being, that the individual may be recognized, must be drawn with the nicest accuracy; a nose a little too short, or a mouth a little too twitching, spoils the whole. The man who cannot distinguish the portrait of George Washington from that of Deidrich Knickerbocker, or Louis Philippe from Jack Downing, pays but a poor compliment to the painter. But in some of our agricultural journals, individual animals are not only wretchedly represented, but it is sometimes even difficult to tell even to what race they belong. The portrait is the representative of the animal, in its absence; let it not therefore deceive. Skinner, of the American Farmer, very justly objects to a figure of a short horn cow in the Cultivator, with a body, he says, weighing about one thousand pounds, standing on four spinnaceti candles! The owner of the cow has since published another picture, still worse than the former, intended for a cow, but the body certainly looks more like a tightly stuffed wool-sack. We must also come in for our share of criticism—a fine cow appeared on our pages, with the legs very much as if squeezed into gun-oneses; and even the figure of the cow "Jessamine," in our March number, though the general outline is very correct, by some fault between the draughtsman and engraver, has one fore-leg represented like a board tacked on to her shoulder with ten-penny nails. It is better not to attempt figures of animals unless they can be executed in the very best style for life and accuracy. Turn to Youatt's treatise on cattle, and take his representation

of the Old Craven Bull, Lord Althorp's two rhocorn cows, and the head of "Firby," as model. There is one journal in this country, which deserves special commendation for its figures of animals—the Farmer's Cabinet. Many of them, it is true, are copied from English books on cattle, but those drawn by Woodside, of Philadelphia, who is first among the first of animal painters, are worthy of all praise. Indeed we have not seen a badly drawn figure in this whole work, since in the hands of the present proprietors.

Cobble Stone Buildings.

The first cobbler stone buildings that I remember to have seen were at Pittsford in Monroe county, nearly twenty years ago; and from the rude appearance of the work at that time, I have supposed the art was then in its infancy; but perhaps some gentleman of that neighborhood will furnish a sketch of its history.

About six years ago the first building of that description was erected in this quarter, one mile east of Aurora; and in my opinion the walls are more beautiful than brick. The beauty of such structures however, will mainly depend on the size and color of the stone, though the color of the sand will have an influence.

If the stone and sand are both dark colored, the building will have a lurid aspect; for the proportion of lime in the mortar (one-eighth or one-ninth) is too small to whiten it sufficiently; but if the sand be light gray, the contrast of the colors with dark stone, will be pleasing.

Cobble stones of any size not exceeding six inches in diameter may be used; but for the regular courses on the outside those of two inches in diameter should be preferred. Small stones give the building a much neater aspect. Two inch stones are very neat, though three inch stones will answer. The inside row of stones may be twice as large as those on the outside.

The mortar is composed of one bushel of fresh stone lime to eight or nine bushels of clean sharp sand. As the strength of the building depends on the goodness of the mortar, it is very important that sand of the first quality should be obtained. Yellow sand, or any sand that contains clay should be rejected. Gray sand is sometimes found so pure as not to discolor the water into which it is thrown; and such should be procured if possible.

Mortar that has been made some weeks is generally preferred. Some masons are particular to reduce the lime to a thin paste, and then while it is hot to apply the sand.

The thickness of the wall is sixteen inches, though twelve inches will answer very well for the gable ends above the garret floor.

When the foundation, or cellar wall, is leveled and prepared, a layer of two (or two and a half) inch s of mortar is spread over it; and the stones are pressed into the mortar in two rows, leaving about an inch between each adjoining stone in the same row. If the wall is to be grouted, the two rows are formed into two ridges by filling the vacancy between the stones with mortar, and the space between these two ridges (about a foot in width) is filled with such stones as are not wanted for the regular courses. The grout is then applied. If the wall is not to be grouted however, the mortar should be carefully pressed round every stone, making the wall solid without trowel or intussusce. When one course is leveled begin another.

Between every two adjoining courses on the outside some have the mortar to project as far out as the stones, in a regular line round the building. It is wrought to an edge with the trowel, and adds to the neatness as well as to the strength of the wall; for during this process the mortar is pressed round every stone; and the smoother it is made the stronger it will be, and the better will it resist disintegration.

It has generally been the practice to have the corners formed of cut stone; but in a two story building erected last season within a few miles of us, this expense was avoided by rounding the corners and using cobble stone. The cut stone is not the only saving by this plant however, much of the mason's time is consumed in laying such corner stones.

On the first mentioned building, the workmen were employed by the day. Four walls, amounting to one hundred and forty-six feet in length, were commonly raised eighteen inches every day by three masons. This is a little short of ninety-nine cubic feet of wall, or six perches to each workman. Sometimes in damp weather they had to stop awhile for the mortar to set.

* Not the Crab apple of this country (*Pyrus coronaria*), which is entirely distinct from both.

building erected last season was constructed for perch at thirty-seven and a half cents; and half sum additional, was allowed for the tender-stalls, however, were grouted—thatis, all the joints between the stones were filled with liquid cement; and this substance must have more time to set, as reason not more than three courses a day can be laid in dry weather; and not any when it is show-

quires from ten to twelve bushels of sand to a besides the lime when made into mortar; and stones lie in a heap when thrown from the wagon, just as commonly as they do in the wall. A stone building is so cheap as wood, as those proprietors believe, they will be much in the long run; and this will be evident when the frequent paintings which are necessary to keep a frame house in decent repair.

Since writing the above, I have received communications from persons who have had colonies houses erected. One says, "the thickness of the wall is measured from the outside of the stones of timber, four by six inches and two feet long, and for setting the lines. These are laid in the wall just finished, and the line is drawn through the wall just sixteen inches apart."

Other says, "The cost of cobbles is about one-third that of brick; and probably one-quarter or one-fifth less than wood,—on the supposition that the wall may be had within a mile, and sand within two or three miles." It must be evident, however, that the expense of cobbles, brick, wood and stone, must be considerably in different places, according to the cost of these materials and the distances they have to be carried.—*Alb. Cultivator.* D. T.

Garfield, Cayuga co.

Scraps.

CONDENSED FROM EXCHANGE PAPERS.

Large Ox. A late number of the Farmers' Cabinet contains a good portrait of the ox "Pennysylvania," bred between the Devon and Durham, eight years lately slaughtered at Philadelphia, which weighed alive, 3,350 lbs., or more than a ton and a half. He was sold for the enormous sum of fifteen hundred dollars. He was only 400 lbs. less than the weight of the celebrated "Durham ox" in England, the owner of which refused two thousand guineas for him; and about half a ton less than Danhill's great York-ox, which perhaps stands at the head of the list of all kind of monsters.

QUALITY OF FUEL. According to the experiments of Marcus Bull, of Philadelphia, the following are the relative qualities of different kinds of wood required to burn off an equal quantity of heat—all to be well seasoned.

Hickory,.....	4 cords,
White oak,.....	.43 "
Hard maple,.....	.63 "
Soft maple,.....	.71-54
Pitch pine,.....	.91-74
White pine,.....	.91-54
Anthracite coal,.....	4 tons.

ITS IN HORSES. A dose of molasses, is said, on the authority of experiment, to be effectual.

RAIN WORM. S. W. Jewett, of Middlebury, Vt. says, from some experiments he has made, that the worm may be successfully repelled from wheat, by making use of the peculiar and intolerably offensive fluid emitted by the skunk, for that purpose.

WITH DOWNS SHEEP. E. P. Prentice, near Albion, sells these for \$20 to \$50 each.

RAISING. Judge McCall, of Allegany county, by means of underdraining, raised last year a good crop of spring wheat, at the rate of 25 bushels to the acre, and the year before the land produced little else but the coarse water grasses. He constructs underdrains in soft ground by placing two pieces of plank edge at the bottom of the ditch, securing their position on edge by stakes driven inside, and covering with a slab. Small notches are cut in the upper edge

of the plank for the admission of water. A more substantial way, and adapted to quicksands, is to lay a slab in the bottom, scantling on each edge, and another slab at top.

THE PHILOSOPHER'S STONE FOUND. McDuffee, in his late agricultural address, speaking of John Randolph, of Ronoke, says, "In the midst of one of his epudid rhapsodies in the Senate of the United States, he passed, and fixing his eye on the presiding officer, exclaimed, 'Mr. President, I have discovered the philosopher's stone.' It consisteth these four plain English monosyllables: *Pay as you go.*'"

SAW DUST. is converted into manure, by the Shakers of Canterbury, N. H., by using it as litter for stables. It has a very decided advantage over straw, in the case with which it mixes with the soil while the manure is yet unfertilized.

ROMAN POTATO. H. D. Grove, in the Cultivator, gives the result of an experiment to test the relative productiveness of the Roman and Merino potato. The soil was in fine condition, being similar in quality for each variety, but the Romans received the most attention. The Merinos yielded at the rate of 550 bushels to the acre, and the Romans only 263 bushels. We have observed in nearly all accounts of the productiveness of the Romans, statements of the rate of increase from the seed merely, and not the rate per acre.

WHITE CARROT. A late number of the New England Farmer, contains several statements of the value of this new variety. It grows partly above ground, somewhat similar to the mangel wurtzel. In one experiment, the same number of men, that harvested in 1839, eighty-two bushels of the orange carrot, harvested in 1840, one hundred and eighty-four bushels of the white. Two prize crops, one of the yellow, and the other of the white, yielded 23 tons to the acre, of the former, and 38 tons to the acre, of the latter variety. Another crop of the white yielded 26 tons to the acre. Another, of 4 acres, yielded at the rate of 1300 bushels the acre.

CORN HUSKING MACHINE. The American Farmer contains a figure and description of Goldborough's Corn Husker and Sheller, and according to the statement of Robert Sinclair Jr. & Co., the manufacturers, 700 bushels are husked and shelled by it in a day, or 1200 bushels shelled, if previously husked. The husks, (stripped in fine order for mattress makers,) cobs, and corn, all pass out together. A boy will rake the husks and cobs from the corns as fast as discharged. The machine is on the principle of the common thrashing machine, with a spring concave bed set with fluted rollers. The cost, separate from the horse power, is \$35. The manufacturers expressly guarantee them to perform as represented.

DURHAM CATTLE IN ENGLAND. The following prices were obtained for fine animals of this breed at the Earl of Carlisle's sale last autumn. One at 110 guineas (about \$500); two at 150 guineas (about \$700); one at 320 guineas (about \$1500); and one at 415 guineas (over \$1900.) It was from the Earl of Carlisle's stock, the famous bull *Rocer*, formerly belonging to Thomas Weddle, was obtained, and from which most of the fine young animals of T. Weddle's stock in this country, originated.

Canada.

Messrs. Editors.—Will not some of your Canadian subscribers give us a sketch of the rural productions of the country, its soil, climate, geology, &c. As we have no primitive rock except the erratic boulders, which have been swept over our country from the North, we incline to the belief that the geology of the North side of Lake Ontario should abound in primitive rock in situ.

It is said that there are there vast swamps of red cedar, (*Juniperus Virginica*;) that under the earth in these places for many feet in depth, are found large trunks of those trees, apparently of antediluvian growth, and perhaps of a much warmer climate than in the present day. On this side of the lake our cedar swamps are filled with the white cedar only, an entirely different genus (*Thuja occidentalis*.) Our red cedar is confined to the East bank of the Cayuga and Seneca lakes.

S. W.

Feed of Durham Cows.

We observe that Skinner, Colman, and other men of high authority, consider Durham cattle not adapted to the short pastures of the atlantic states, but suited only to the rich lands and luxuriant feed of the west. If this is the case, we can mention one very decided exception. The full bred Durham cow, in the possession of W. R. Smith, figure in our March number, was kept through the last summer entirely on the shortest pasture that could be selected, yet during the whole time she continued so fat that fears of danger in calving were strongly entertained; the native breed, in the same pasture, continuing in greatly inferior condition.

The Peach Worm, and the Borer.

While the *peach-worm* confines its operations to the pulpy part of the bark, the *borer* cuts through the solid wood. Both insects are occasionally destructive: the former by girdling, prevents the descent of the juices or liquid wood, and destroys the tree by strangulation; while the latter by performing many parts of the albumen through which the sap ascends, cuts off the channels of its nourishment, and destroys the tree by starvation.

The *peach-worm* in this district is found chiefly, if not entirely, near the root of the peach tree. The *borer*, on the other hand, lives in the quince tree, the mountain ash, and not unfrequently, the apple tree. We have never known it attack the pear tree, nor any tree from which gum exudes.

Both of these insects spring from eggs which are generally deposited in the bark near the ground; but the *peach-worm* works chiefly downward, so as to have its habitation protected from the cold of winter by the soil, only coming occasionally to the surface to dispose of its filth. The *borer*, on the contrary, penetrating into the interior of the wood, and keeping the entrance of its hole entirely closed, so as to exclude the cold air,—often works upward; and we have known it, when passing into the perfect state, to leave the tree at the height of more than two feet from the ground.

We should judge that the easiest way to destroy the *peach-worm*, is by scalding, as noticed in our last number by a correspondent from Ohio; but this remedy would be useless in most cases, against the *borer*, on account of his ascending progress, and his position in the interior of the tree. We have destroyed them in considerable numbers by means of a barbed wire, but the operation is often tedious from the crookedness of their holes. We have therefore for two years past, endeavored to exclude them from one of their favorite trees (a mountain ash) by coating the bark to the height of three feet with tar; and by rolling a newspaper round it, to protect it from the weather, tied in three or four places; and the plan has succeeded completely.

The *borer* is the chief cause of the scarcity of quinces in this district. We have had more than thirty trees destroyed by it; but we do not despair. The same process that protects the mountain ash, will protect the quince tree. Let the stems be single to the height of three or four feet; and only part of a day on the commencement of mild weather, would be required to guard a hundred in the manner that we have mentioned.

For the New Genesee Farmer.

Clover Machines—Raising and Cleaning Clover Seed.

Messrs. Editors—The attention of the public has been called at different times to the subject of Rittenhouse & Blackwell's Patent Clover Machine, for cleaning or hulling clover seed; and I will take the liberty of again calling their attention to this subject.

Living in a district where large quantities of clover seed are raised, and having been extensively engaged in purchasing and selling the seed, and also, having been engaged in cleaning it with one of Rittenhouse & Blackwell's machines, propelled by water power, I have had many opportunities for acquiring information upon the subject.

I am satisfied that Rittenhouse & Blackwell's clover machine is the best one now in use, as it can hull the seed faster and cleaner, and can be propelled by less power than any other; which must give it a preference where horse power is to be applied.

I have seen the certificate of a number of gentlemen with whom I am well acquainted, some of which (as I understand) have been forwarded to you for publication; and I can say, I have no doubt of the truth of the statements made by them.

The power of two horses is necessary to propel a machine, and any horse power can be applied to this machine as well as to a thrashing machine or cotton gin, by regulating the size of the pulley block or band wheel, so as to give about 800 revolutions per minute to the cylinder. The concave is placed by means of nuts and screws, as near to the cylinder as it can be without cutting the seed, which of course must be regulated by the man who may use the machine.

The chaff should be thrashed out with the flail, as a thrashing machine cuts up the straw too much, which mingles with the chaff, and renders the process of hulling much slower. Some persons use a hand bolt about 12 feet long, the reel of which is covered with thin boards bored full of holes five eighths of an inch in diameter, through which the chaff is passed before it is passed through the clover machine.

After the chaff has been hulled, it may be cleaned through any fanning mill, by arranging the mill as described in your September number for 1840, which perhaps it would be well to republish.

In the number above referred to, you make some inquiries about the plan adopted for raising the seed, the best soil, &c.

In this vicinity the farmers usually sow their seed in April, the same as if designed for meadow. The second year it is cut for hay, about from the 25th of June to 1st of July. Another crop springs up which is for seed. This is cut when sufficiently ripe, and if not perfectly ripe it should be cut before any frost comes upon it. The farmer must exercise his own judgment as to the fit sate of the seed for being cut. It should, if possible, be secured without getting wet, otherwise much seed will be lost in the hulling process. Where land is sown for the purpose of procuring a crop of seed, at least a bushel to five acres should be used. From two and a half to three bushels of seed is a fair average crop per acre. I have known seven bushels raised.

Almost any land is good for raising the seed, although some kinds of soil require a free use of plaster.

I would here observe, that farmers cut clover three years in succession for the seed. Yet it is better for the land that the clover should be ploughed under the third season.

Yours respectfully,

N. P. LEE.

Watloo, Seneca co., N. Y.

P. S.—After the seed has been passed once through the fanning mill, it should be passed through a fine riddle, with the meshes sufficiently small for clover seed alone to pass through.

Low and High Prices.

Messrs. Editors—Much has been written of late upon the improved system of agriculture, upon Legislative aid, and upon agricultural societies,—all of which are subjects of high importance, calculated to increase and multiply the real and substantial wealth of a country. The only difficulty in the improving system and the rotation of crops, increased outlay on the farm, &c., is the low prices of produce. And yet, perhaps, for the last year, considering the crisis of our country, this has been for the nation's interest. But it is only a desperate state of affairs that can render such a depression of prices even tolerable. Until we have more to encourage us than we have at present, under the low prices of all produce, and a prospect of none better under a continued reduction of the tariff, but little improvement in agriculture can be expected, as there can be but little or no profit derived from it.

These ideas may be considered vague by some, but they are nevertheless true; that when a business offers a fair emolument it will receive the attention of enterprising men, and it will become a courted and popular occupation. Whereas, without this reward, it will be neglected. During the high prices of from 1836 to '40, more encouragement and more improvement was realized throughout our country, than in any number of years previous. Not but that prices were too high for our country's benefit during some part of that time; but the attention and progress in all parts, in farming during that period are sufficient to prove the truth of my remark. In regard to Legislative aid, it is needed not so much from our State Legislature, as from our national. Nothing short of an increased tariff, to promote and foster the manufacturing interests, can ever place our farming interest in a prosperous and healthy condition. At present, we can only look for fair prices in the result of a short crop in Europe or our own country, which, at most, can be but accidental; and then our country may grow rich only on the misery of another. We must correct this state of things which we are now practicing, of buying of other countries millions and tens of millions of those articles which we can as well produce and manufacture ourselves, if we would be an independent and prosperous people. And there is no way to effect this object, unless we become so poor we cannot buy, but to lay on a duty on British and French goods corresponding to their duties on our produce.

The objection now raised to the tariff, that it is at variance with the interests of the cotton planters of the South, will, in my opinion, cease to exist in a few years after we adopt that system. We may soon so increase our manufacturing business as to create a home market for a great share of the cotton grown in our country. The idea of making all producers, and relying on a foreign market, cannot be considered a wise policy, for a free trade with England can never be realized, whether it might prove beneficial to us or not. British agriculture will ever be protected—so ought American manufacturing to be. By driving all into the business of grain growing, we encourage so rapid a settlement of our rich wheat country to the West, not yet hardly begun, that in a few years we should be able to supply almost half of Europe with bread stuff, for which there can be no demand. By these remarks I intend to show in opposition to your able correspondent "S. W." that low prices of agricultural produce are not in general more beneficial to the nation's prosperity than high prices. A surplus will always cause a decline in price; but fair prices for produce and fair prices for labor, are blessings of prosperity; whereas, the reverse is a check to enterprise, and by no rule can be made beneficial to national wealth or prosperity. A SUBSCRIBER.

Sweden, N. Y., April 20, 1841.

The Flowers of Spring.

Though the season is backward, and the balmy days of the last month have been few, yet some bright flowers have come forth, exhaled their odors, and passed away.

The *Snow drop*, white like the snow that often invests it, is always the earliest flower of the spring and seems regardless of inclement weather. No variety, except that with double flowers, has sprung from this plant; but another species from the Crimea has been described, though we believe not mentioned any American Catalogue, and perhaps it has not yet crossed the Atlantic.

Next to this flower in earliness stands *Eranthis hyemalis* from Italy, with its yellow bloom scarcely tinged above the frozen soil. Its generic name means earth-flower from its humble stature.

Then the *Crocus* follows, consisting of several species,—all nearly allied, though varying greatly in color—pure white, deep yellow, and rich purple, with many intermediate tints. Some florists advertise more than a hundred kinds, but none with red flowers. The *Crocus*, unlike the *Snow drop*, opens its cup by looking upward to the sky, but closes it on the approach of a dark cloud as if fearful that something would drop in. No garden should be without these ornaments.

The *Bulboodium* may be considered a vernal *Calchicum*, to which genus it is nearly allied. Its pale red flowers contrast finely with the *Crocus*.

Differing entirely in form and color, comes forth the *Persian Iris*, as delicate in tints as in fragrance which "scents the garden round." There is one circumstance however, respecting this flower, which may be peculiar: the olfactory of many persons are unable to detect its odors.

No shrub is so early in bloom as the *Mezereum*; but its fragrance and beauty are rejected by some florists because it bears acid or poisonous berries. If we were to eat every thing that comes in our way however, our journey on earth would be short; and we have not been able to discover why other berries—those of the *Nightshade* for instance—are not entitled to as much consideration.

The *Siberian Squill*, resembling a hyacinth in miniature, seems to peep out as if half afraid of the season; but as the spring advances and a milder air surrounds it, it raises itself to the height of three or four inches. It has no rival at this time in the delicate form and color of its flowers.

Primula veris spreads into numerous varieties under the names of *Primrose*, *Polyanthus*, and *Cowslip* (modern botanists to the contrary notwithstanding) and seems to pass into all colors except blue. Some of these kinds almost equal the *Auricular* in beauty.

For the New Genesee Farmer.

"Bots and Horse Eels."

Messrs. Editors—Since the appearance of your last number, the inquiry has been made, whether the nits or eggs of the bot-lice must be hatched in the stomach of the horse or not at all. The reply is, that the bot has rarely, if ever, been found in any animal but the horse. This is its appropriate place for habitation and food, as the apple tree is for the canker-worm. In general, all such animals are endowed with the instinct which leads to the deposition of their eggs where they will obtain their appropriate nutriment. The wisdom of this general law is most obvious. The tick is found almost wholly on the sheep; and on the swine he would soon die, as was once remarked by a farmer of the *louse* in the same situation, of starvation. The bryce of the gad, or goddily, finds its home and food on the back of cattle. They then abound, too, upon those which have inferior strength

catass. Hence, in the spring of the year, they are greatly to aid by their activity in the skin, in turning the poorest cattle still more unable to increase their flesh. The more special care of the farmer is to be bestowed upon such parts of his herd, as are true also of the sheep; the poorer suffer more from those insects which have been deposited in their nose. It is from the consequences of this, that some judicious farmers never intend to rear an inferior animal.

While noticing such general and wonderful laws of animal motion, it may be well to explain a fact, similar till understood. In summer and the hottest part of the day, sheep congregate beside fences and the like, holding their heads down and between their fore legs, till suddenly they run in terror of fright to another part of the field, where the same act is acted over. It is to avoid the insect that lays eggs in their nostrils, that all this is done. In the winter weather, or cooler part of the day, the insect is inactive, and does not annoy them.

In respect to bots as a disease, it is to be remarked that other diseases are often mistaken for it. Hence one reason why the remedy applied often fails is the desired success. Sometimes other animals aggravate the bots, and would prove fatal without the others. I have seen worms from four to six inches long, boring the liver and some other intestines of a horse that was sick with bots and died from one or both causes. It would be well if more frequent and careful examinations of the body were made in such cases. Improvements in anatomical knowledge have been of the highest consequence to the understanding and cure of the diseases of man. Similar results might be expected from like examinations, to ascertain the seat and cause of disease in the horse, the noblest and most useful of our domestic animals.

C. DEWEY.

The Curelio.

Now is the time to attend to the Curelio; and to use your plums, nectarines, and apricots from destruction. We believe the winter-residence of this insect has not been satisfactorily ascertained, though it is probably in the earth; but for practical purposes, it may be sufficient to know that it is always ready for business as soon as there is anything to do—always ready to puncture the young fruit as soon as it is large enough to receive a nit.

Several methods have been proposed or adopted, to prevent its depredations. Spreading sheets under the tree, and knocking down the Curelio on them, by striking the trunk or branches with a mallet or hammer, has been found very successful. The insect, after it has fallen, generally lies still long enough to be caught and crushed; and its dark color contrasting with the whiteness of the sheet, favors its detection. This work should be done as early in the season as the predator can be found. In a few days it may do much mischief, and it is no easier killed after the season is committed.

Some have employed turpentine round the tree, and sets of shingles dangling in the wind to frighten the curelio away; but we are not prepared to say anything in their favor. The most recent project that we have noticed is to dip strings in the drops that fall from the tree, whether it is burns, and then to tie them round the tree, which it is supposed will be sufficiently viscid to arrest the insect in its ascent. We should be gratified to hear of any successful experiments of this kind; but though we have gone so far as to environ one tree in the manner proposed, our hopes are not very sanguine.

The most successful fixture to prevent the ascent of this insect that has come to our knowledge, was

applied to some plum trees last season by our friend Thomas Lefever of the town of Venice. It consists of a circular trough made of tin, which was kept constantly supplied with water; and the narrow space between the trough and the tree stuffed with tow or something similar. The trees so treated bore good crops, while not a plum on the other trees escaped. A few of the plums however, were found to be wormy, occasioned perhaps by some of the insects remaining on the tree when the troughs were applied; and it would therefore be prudent to jar the trees at that time. About harvest the apparatus should be removed.

Tin troughs of that description are worth about eighteen pence; but the person who applies them, must understand the art of soldering.

From the Albany Cultivator.

The Sugar Beet.

MESSRS. GAYLORD & TRERER—I have noticed in the late numbers of the Cultivator, Dr. Guthrie's and Mr. Beament's attacks on the sugar beet, insinuating that it is an almost worthless root for the feeding of stock; and as the opinions of these gentlemen, with partial experiments, are directly at variance to those of the most competent agriculturists of France and Germany, after an experience of more than thirty years, and to those also of many of our own countrymen, after trying it with satisfactory effect about five years; and as I had the honor of appearing in the last May number of the Cultivator, strongly recommending its production and feeding, I feel bound to make some comments on these communications, and reiterate my own experience in the feeding qualities, of what I consider as one of the most valuable of roots.

I am perfectly satisfied by Dr. G.'s statement of the analysis that he made of the beet, vol. xiv. p. 40, that he was either grossly imposed upon, in the purchase of seed, and had grown the mangel wurtzel instead of the white Silesian, or that he had planted it in so rich a vegetable soil, as to produce so rank a growth as to almost destroy the saccharine matter that is usually found in it, especially when he adds, that "the beet brought upon our table are totally destitute of sweetness." Now I have not only my own taste for three years in succession, to prove that the sugar beets raised in and about Buffalo, are exceedingly sweet and nutritious, but can also bring a hundred witnesses at any time to corroborate the assertion, from their own daily eating. The famous blue beet cannot compare with the sweet, tender Silesian, and as for mangel wurtzel and other beets, they are almost tasteless after them; and they are never boiled in a pot by themselves, that there is not a sweet syrup at the bottom, almost of thickness and agreeable taste of sugar-molasses, which, in my opinion, only want to be clarified and graduated to make good sugar. So much for personal taste and experience; now for that of stock. I know that fed raw to cows, they considerably added to the quantity and especially the quality of the milk, making the butter as sweet, and almost as yellow as is produced on fresh summer's grass; they also keep them, with the addition of any alone, in the best possible order; and the young stock fed on them, together with hay, were as fat and almost as fine and glossy in their coats, as when on the best of summer pasture. I never tried them with horses, but should hardly think them hearty food enough for those at work. Not keeping sleep, of course I could not experiment with them; but others speak very flatteringly on this point, as may be seen from some communications that went the rounds the year past in most of the agricultural papers, copied, I think, from the Philadelphia Cabinet. Beets there were said to produce the best of mutton, and the finest of wool.

The most important use, however, that I have made of them, is with hogs. But as my hogs embrace only the China and Berkshire, it is in reference to these that I can speak; and here it seems that Dr. Guthrie's Berkshires did tolerably well, while his others almost starved. The first winter I kept my grown swine partly on beets and partly on potatoes, raw; the second winter almost exclusively on raw beets, thrown to them on the ground. I did not notice any difference whatever in their appearance during these two seasons, but each time they were kept in as good flesh as ever I wish to have breeders, and they were by no means allowed to eat their fill of them either. The third winter, (the last) having erected a steaming apparatus, with a new piggery, I commenced cooking the feed for my hogs, and have frequently served beets alone and fed them to all

ages, from the pig two months old, up to the grown animal of four years. To the last, I had to stint them to a common water pail half full twice a day, or say from eight to ten quarts, or they would get too fat for breeding; and as to the former, with the addition of a bullock quantity of corn, I never saw animals thrive better, or more contented in my life. They would fill their bellies and be down in their straw, and deco away for hours together as contented as puppies and as whist as mice; and this stock thus treated, I am not afraid to show, either for general size or firmness of point, against any thing in the United States, saving my late importation, and that only for great weight, these last being somewhat of a larger class than is used among Berkshires. During this same winter I steamed a mixture of carrots and potatoes with the beets occasionally; but in feeding I found that as a general rule, the pigs would pick out the beets first, the potatoes second, and the carrots last, and they would be hungry at last, but if any one were to ask which I thought the most nutritious, I should say the potato without doubt. My accommodations are too limited, however, to make the careful experiment as to the relative value of roots, bushel for bushel, and again in comparison with grain, as requested by Mr. Canon of Illinois, but I trust that the above will be satisfactory to him and to others, so far as it goes, for it is experience and not theory. I must say that I do not like this jumping at conclusions from partial experiments. I recollect reading an address, some two years ago, by some one in Pennsylvania, before an agricultural society, in which the writer maintained—and succeeded in being an intelligent, scientific man—the potato lagna, by analysis, was but little else than wood, and therefore as a food for man and beast, it was almost totally worthless. Indeed! And yet this same despised root, together with a little straw, makes most of the English beef and mutton, and in some instances at times one-fourth supports its laboring population.— Apropos to this: I recollect once telling an intelligent neighbor that I cultivated pumpkins a good deal, and liked them much as food for swine. "Well," he replied, "they never did any thing for my hogs but scour them." The fact was, he had an inferior breed of animals. Again, I shut up some Berkshire sows that were quite poor, about three weeks to put them in condition; they were allowed nothing but pumpkins during this time, and were then turned out, having got really, in that short time, almost too fat for good breeding. An intelligent gentleman who had seen them previous to their being shut up, and then again when they were let out, acknowledged that nothing but seeing the thing with his own eyes would have convinced him of the truth of it, and wound up by adding, (I do not give the words exactly, but the ideas,) "why, instead of fattening them, the urine that would have come from common hogs thus fed, would have made them skeleton poor by this time." I am no chemist, and therefore I humbly ask what would be the analysis of such a diet? Not much, I fancy, but water. And yet Berkshires, and in fact, all good crosses of the China hog, will keep fat upon it in summer and grow well; and I will conclude this long letter on sugar beets by saying, that if their stock does not thrive upon them, why then gentlemen have been deceived in their seed, or they have not got the right sort of animal to consume their roots.

Yours,

A. A. ALLEN.

A Crop of Corn.

I give below an account of a crop of corn raised last year. The lot contained four acres, of a rich gravelly soil. It was well manured from the barn-yard, and then these rows were intersected with rows of manure from the hog-yard. It was ploughed of sufficient depth, well harrowed, and planted about the fifth of May. The corn was a bright eight-rowed yellow variety; the rows three feet by three and a half, five grains to a hill. When sufficiently high, it was dressed with a mixture of one part by measure of plaster and three of ashes, a table spoonful to each hill. After weeding, it received another similar dressing.

The product was seven hundred and fifty bushels of good sound corn in the ear, twelve loads of pumpkins, sixteen of stalks, and the net profit of the field was ninety dollars.

A. G. S.

Springhill, Cayuga co., April 12, 1841.

Pride is the first thing that overcomes man, and the last thing that man overcomes.—St. Augustine.

"Washington's Letters on Agriculture."

Mr. D. Hoyt, Bookseller of this city, has placed on our table a very interesting and curious volume; being Fac-Similes of Letters from George Washington, President of the United States, to Sir John Sinclair, on Agriculture, and other topics. This is an American Edition, copied from the English, which was published in London some years ago, by Sir John Sinclair, from whose advertisement we extract the following remarks:—

"It could not but be highly gratifying to me, to be possessed of so many interesting communications from such a distinguished character as the President of the United States; and it was natural to suppose, that the public, but more especially those individuals who revered his memory, would wish to have in their possession copies of a correspondence which displayed to such advantage the superior talents, the generous views, and the unbounded philanthropy of that celebrated statesman.

"The peculiar predilection which General Washington has so strongly and so frequently expressed, in the subsequent letter, for agricultural improvement, which he preferred to every other pursuit, is another circumstance which I was anxious should be recorded for the benefit both of the present and of future times, from a desire that it may make a due impression upon the minds of those who might otherwise be induced to dedicate themselves entirely, either to the phantoms of military fame, or the tortures of political ambition.

"As it is a singular circumstance that a person in such an exalted situation as General Washington, should have leisure to write, with his own hand, so many letters to an entire stranger, and some of them of considerable length, I have been induced to have them engraved in order to represent the handwriting of this celebrated author; they are exact copies of those received by me. It is proposed to deposit the originals in the British Museum, as the precious relics of a great man, fit to be preserved in that valuable repository."

Some Remarks on the Value of Live Stock with relation to the Weight of Oxen.

BY THE HON. ADAM FERGUSON, OF WOODHILL, CANADA.

MESSENGERS. EDITORS—In the improvement of live stock in this country, the views of breeders have been long directed to the selection of animals of good shape and a "kindly handling;" and attention to the establishing of new breeds, or to the improving of old ones, has always been appreciated by the public, as reflecting credit upon the enterprise of the individuals, and as conducing to the prosperity of the country. A judicious improvement in live stock is not limited in its effects to that object alone. It never fails, at the same time, to improve the agriculture of the country around; the land being necessarily drained, enclosed, and cultivated, in a manner adequate to raise the superior kind and quality of the produce now required. Such being the beneficial consequences of an improvement of live stock, no suggestion ought to be disregarded which may lead to that important end.

It may be laid down as a maxim, that those breeds, or varieties, are best, which will pay most, all things considered, in the shortest period, or which will produce the greatest weight of marketable produce from any given extent of land, and within any given period. And, in like manner, it may be stated, that the animal of any given breed, which, in relation to its live weight, will bring to the butcher's stall the greatest quantity of good meat and tallow, is the animal of the greatest value. Now there is some reason to suspect, that a question having relation to this latter point has been of late too much overlooked, arising from carelessness on the part of the farmer, with some professional mystery, perhaps, on the part of the butcher. The question here referred to, is that of the live and dead weight; and the ratio which one bears to the other in properly fed animals. It is true, that various tables, founded on the determination of this question,

have been constructed with the view of assisting the farmer in the disposal of his stock; and such tables are no doubt to a certain extent convenient and useful. A difficulty, however, has generally presented itself in bringing their accuracy to such a direct and palpable test, as to be sufficient to induce a keen and discerning purchaser, and compel him to admit that the seller does not overrate the weight of the animal. It would seem that attention, at once more extended and minute, must yet be bestowed before the relative live and dead weight of stock can be ascertained, in a manner equally satisfactory to the buyer and the seller.

The particular error into which it is conceived many have fallen, lies in estimating the dead at only one half the live weight. It is sufficiently apparent that should the former, in any material degree, exceed this proportion, a very serious loss may be incurred by the seller, who founds his calculation upon that datum; and from some authentic returns, to be just submitted to the reader, it will be seen that an inference to this effect may be reasonably drawn.

In the extensive farming concerns of the late Mr. Curwen, at the Schoose, County of Cumberland, England,—a mode of estimating dead weight was adopted, somewhat singular in its nature, and said to be remarkably correct in its results. Glover, the stock bailiff, a very intelligent man, made use of what he called his "magical number," "556," by which, upon receiving the live weight, he professed to give the dead weight, sinking off, of any fat animal submitted to his test. The writer need scarcely observe, that there is nothing really "magical" in the number 556, or in the manner of obtaining it. If an ox were to weigh 50 stones when alive, and the dead weight were found to be 25 stones, the ratio of dead to live weight would be represented by the fraction $\frac{25}{50}$ to 50 which, converted to decimals, would give 5, and this, multiplied by the live weight, would give the dead weight. But if Mr. Glover, by a series of more correct observations, found that upon an average of oxen the live weight was 50 stones, and the dead weight 27 stones 11 2-10 lbs., the proportion of dead to live weight would be represented by 27 stones 11 2-10 lbs. to 50, which converted to decimals, would give .556; which again multiplied by the live weight would give the dead weight. In one instance, (verified by the writer,) Glover's calculation certainly approached very nearly to the truth, and gave a greater return than competent judges were disposed to allow, from handling the animal alive. The subject of experiment was an Ayrshire heifer, 18 months old, which Mr. Curwen slaughtered at one of his great general meetings, as a sample of his favorite system of soiling. This animal had never been a day out of a calf pen or steve yard, from her birth, had never tasted of cake or grain, and was undoubtedly a very forward animal of her age. Her live weight was correctly ascertained to be 55 stone, of 14 lbs. to the stone, which being applied as a multiplier to the magical number, and cutting off the three figures to the right, gave the following product: $556 \times 55 = 30,580$, that is, holding the three right hand figures as decimals, about 30½ stones. The weight of this heifer, by measurement, in Ainslie's tables, was pretty nearly the same. The actual result gave 30 stones of meat, and 2 stones of loose fat, fine marbled beef; but by no means prime fat. In this animal, then, which had certainly not attained a state of perfection, we have a return considerably exceeding one half of the live weight.

Mr. Rennie of Phantassie, (probably the greatest practical agriculturist in Scotland, of his day), and Mr. Curwen, with their respective adherents, differed in their estimation of the live and dead weight upon general principles. Mr. Rennie would not allow

more than one half of the live weight to be reckoned upon, except in cases of extraordinary fat, to which certainly the heifer in question had no pretensions; and in whose case, notwithstanding the proportion Mr. Rennie, were considerably below the mark.

The following details will still further illustrate the subject, and may tend to excite more than a doubt whether one-half be not too small a proportion to assumed in estimating, the live and dead weight stock.

Tables of Sheep and Cattle slaughtered in various years, with the amount of live and dead weight, stone of 14 lbs.

	Live Wt.	Dead Wt.	Tallow.
	Srs. lbs.	Srs. lbs.	Srs. lbs.
1. A Leicester sheep, 2 years old.	12	7	1
2. A Leicester sheep, 3 years old.	10	6	1
3. A Leicester sheep, 4 years old.	11	6	1
4. A black head sheep, 4 years old.	12	6	1
5. A Cheviot ewe, 2 years old.	8	6	1
6. A Leicester ewe, 2 years old.	11	6	1
7. A black head ewe, 2 years old.	10	6	1
8. A Cheviot ewe, 3 years old.	7	7	1
9. A Cheviot ewe, 4 years old.	7	7	1
10. do	7	7	1
11. do	7	7	1
Total.	106	64	7
Average.	9	5	1

According to the average on the above table, Mr. Glover's rule would give 5 stone 5 lbs. as the dead weight; but the true multiplier would be 605, instead of 556, according to Mr. Glover's practice; or instead of 500 according to the common practice.

	Live Wt.	Dead Wt.	Tallow.	Hide.	Other off.
	Srs. lbs.	Srs. lbs.	Srs. lbs.	Srs. lbs.	Srs. lbs.
1. Ayrshire ox.	132	11	1	2	1
2. A short horned ox.	120	10	1	2	1
3. A short horned Gany.	120	10	1	2	1
4. A West Highland Steer.	120	10	1	2	1
5. An Ayrshire heifer.	120	10	1	2	1
6. do	120	10	1	2	1
7. do	120	10	1	2	1
Total.	771	65	7	11	7
Average.	127	10	1	1	1

The above table gives the same result to a fraction as the last, and this curious coincidence is deserving of notice, as occurring in the case of animals so entirely

II. CATTLE.

in their form and character, as sheep and oxen

the general conclusion to be drawn from these results would seem to be, that the practice of estimating dead weight at one half the live weight, is erroneous.

It would by no means, however, be safe to draw a specific conclusion as to the actual proportion of live to dead weight from the tables now given, on account of the limited number of the returns made. It is only by means of a great number of such experiments that we can hope to obtain a just medium, and found on it a safe conclusion. Could farmers be induced to give more attention to this subject, by keeping accurate records of stock slaughtered by them and their ends, much might speedily be done to settle the question of the live and the dead weight, while there is good reason to believe that many respectable butchers would concur in preserving and communicating similar details. A further purpose might be promoted by constructing such tables. We should, by means of them, be able to discover the breeds or varieties of our different species of stock which yield the greatest *turn in proportion to the offal*, and thus perhaps be enabled to draw conclusions as to the relative value of different breeds.

It has been before observed that the question of the ratio of live to dead weight seems to have been a good deal overlooked of recent years. At one period, the attention of individuals, admirably fitted for the investigation, appears to have been awakened to the importance of the inquiry. In the able report of the county of Durham, some interesting details on the subject are given; but these can scarcely be said to do more than open up the subject; and certainly a great blank remains to be filled up before the farmer and the professional butcher shall be placed on equal terms as regards their information upon this point.

Should these cursory remarks tend to direct the attention of breeders and graziers to this interesting subject of inquiry, the object of the writer will have been fully accomplished.

Geology of Pennsylvania.

In the "Third Annual Report on the Geological Survey" of that State, (1839,) Professor Rogers in describing his "MIDDLE SECONDARY RED SANDSTONE FORMATION," makes the following remarks:—

"It seems to have originated in a long narrow trough or bay which had its source at least as far so thence as the central latitudes of Virginia, and which probably opened into the ocean somewhere near the present positions of the Raritan and New York bays. Their materials give evidence of having been swept into this estuary or great river from the south and south east; and hence the almost universal dip or inclination of the beds towards the northwest, a feature clearly not produced by any uplifting agency, but assumed originally at the time of their deposition in consequence of the direction or set of the currents, which laid them down layer after layer. With the exception of one or two fossil fishes found in this formation in New Jersey, I am not aware that any animal organic remains have been hitherto met with in any part of the stratum; and hence it becomes difficult to assign its precise place in the general series of geological formations. Relics of vegetation are however, occasionally found under the form, especially of highly compact and bituminous lignite."

It is possible the strata were formed in the manner he has mentioned; and that no "uplifting agency" has given them their present dip; but we think such a conclusion ought to be founded on something more than cursory observation. It seems to us very improbable. We have not learned however, whether this able geologist has relinquished, or still retains that singular opinion; for it has not been in our power to procure either of his later Reports; but if he should examine the locality which we shall proceed to designate, it is probable these fossils would indicate the age

of the formation, and their position shed some light on the manner in which they were deposited.

About half a mile northeast of Phoenixville in Chester county, on the opposite side of the river Schuylkill, on a high hill, we saw OYSTER SHELLS imbedded in the solid rock which had been laid bare by a torrent. It was shown to us in the fall of the year 1806; and as we had not found any fossil shells below the Blue Mountains before that time, we viewed it as a great curiosity.

For the New Genesee Farmer. Letter from Wisconsin.

MESSES EDITORS—Perceiving that you have no correspondent from this territory, I take the liberty of filling that station, and will, whenever time shall permit, give an account of matters and things as they exist in this "Badger" territory of ours—promising, however, that I leave it to your readers whether my communications are interesting or not. Many of them have friends and relatives in this territory, and it may prove of interest to them to hear occasionally from this quarter.

Much has been written and said in respect to Wisconsin, its fertility, its universal wealth, and its natural advantages; but much remains to be told in relation to the system of farming that has been adopted in some parts of the territory; although there is much to be urged in extenuation, as the country is new, and most of the settlers are men of limited character; but still there are many among us, who, if they would take the trouble to look a little into the future, and loose their purse strings, could confer a benefit upon the territory, and upon themselves and their posterity. The introduction of improved farm implements and machinery, such as the thrashing machine, the straw cutter, the horse rake, the cultivator, and the hundred other useful implements to be found in the agricultural repositories of the east, would be of immense utility on our fine rolling prairies, where there are no stumps nor stones to obstruct their operation.

Many of the settlers are men who have not been bred farmers, but who have left the workshop to try their hands at the plough, and some of them are rather "green" at the business, among which I class myself. But I find one trait among them which is not found so generally among the old class of farmers. They are more of a reading people. Deprived of the advantage of experience, they are obliged to depend upon the knowledge of others, and are therefore more willing to lend their support to the agricultural journals of the day, than are those who have imbibed their knowledge and their prejudices from a daily experience in agricultural pursuits.

Although at this time the natural fertility of the soil of Wisconsin supercedes the use of manures, the time will come, if the eastern skinning system is followed, when it will require all the renovating powers of a proper rotation and application of the various fertilizing substances, to render an equivalent to the farmer for his labor.

Wheat is destined to be the great staple of this territory, and many are pursuing the same system that was adopted in the Genesee country, that of growing wheat to the exclusion of any other crop, on the same land.

Corn ripens well in this country, but it will never, probably, be grown to the extent that it is in Indiana and other states to the south of us; but enough, however, to supply the community, as the "badgers" are not such "corn crackers" as their neighbors in the boister state and in Kentucky, whose national dish is "corn dodgers and hoe cake." Every variety of soil may be found in this territory, and any thing may be grown here that will thrive in New York or New England.

With an extent of territory larger than any state in the Union, and possessing, as she does, immense treasures in her lead and copper and iron ores, Wisconsin presents at the present time an object worthy the attention of every well wisher of this country. Still reposing in her minority as a territory, she holds out to the patriot and the moralist the hope that her constitution and laws, will receive the benefits of the experience and legislation of the older states of the confederacy, and that by their misfortunes and miscalculations, she will steer clear of the rocks and quicksands on which many of them have been nearly wrecked. Taken as a whole, I do not believe there can be found a more moral class of people in the United States than in this territory. They are composed, to be sure, of almost every nation; for here you will find the Dutchman, the Norwegian, the Englishman, the Russian, the Prussian, the Frenchman, the Scotchman, and the sons of "Green Erin," all congregated in one community and amenable to the same laws, although they retain their national habits. It is amusing to see some of the Norwegians and Dutch open a farm in the thick forest. They make thorough work of it. In clearing, they commence at the root of a tree and dig round it so that it falls, either by its own might or by the wind. They then log it and burn it before they proceed further. By this means they get a clear field, unobstructed by stumps and logs, as you will find is not usually the case with the Yankee or English farmer.

Wisconsin at this time holds out great inducements to breeders of stock, especially as her beautiful prairies afford the best of pasture, and there are many thousand acres yet unentered, that would far surpass in worth many of the meadows of the eastern states, for the pasturing of cattle. Nearly all the neat stock now in the territory, is from Illinois and Indiana, and consist of all bloods, colors, shapes, and sizes; and you may see here also the famous breed of hogs which friend Robinson, of Lake C. H., took such a fancy to as to think he could fat them. They are the real land pike and alligator breed, snout and all. An improvement is beginning to be made in this race of quadrupeds and you may see the Chinese and Berkshire blood running in the veins of many of our grunting inhabitants. There are a few full bloods in this neighborhood, and their progeny are being distributed through the country, and will result much to the benefit of the farmer. There have been a few importations of blooded cattle into the territory. Jupiter, imported by Mr. Geo. Reed of Milwaukee, is a fine full blooded Short Horn Durham Bull, eight years old; and another, belonging to Judge Doty of Green Bay, have been productive of great benefit to this section of country; and half bloods, and other grade animals may be often met with.

But I have written more than I intended at first, and shall conclude, and take another opportunity, when I am "in the vein" of giving you a second communication.

Yours, &c.

E. B. QUINER.

Milwaukee, W. T., March, 1841.

MICHIGAN COAL.—A load of coal passed through this village a few days since, on its way to Detroit, from the village of Corunna, in Shiawassee county. The gentleman who owned it, left a small specimen with us. It has the appearance of the coal found at Pittsburgh, Pa., and burns as freely, emitting the same smell. The gentleman informs us that, from present appearances, the supply is inexhaustible, and is found within three feet of the surface. It is represented by our informant, which we do not doubt, it will be a source of much wealth to the State at large, and add immensely to the business of the place at which it is found.—Pontiac Jacksonian.

Wilhefore, who had a great taste for horticulture, considered flowers to be the smiles of the Divine goodness.



ROCHESTER, MAY, 1841.

Monroe Co. Agricultural Society Meeting.

A meeting of the Monroe County Agricultural Society will be held according to previous notice, on Wednesday the 5th instant, at 10 o'clock, A. M., in the long room, 3d story, Arcade Building.

It is particularly desired that all who feel an interest in the objects of the Society will be present, as very important business is to be transacted.

Legislative Aid.

The bill for the encouragement of Agricultural Societies, has passed the Assembly and to a third reading in the Senate. It will doubtless become a law before many of our readers receive this paper. (We stop the press to announce its final passage.)

Corrections.—The bill appropriates \$7,000 per annum—not \$7,000 as stated last month. We also stated that the report was made to the Assembly before the petitions from Western New York were received. We should have said before many of them were received.

We will, next month, publish an abstract of this bill, and also the one for the encouragement of Silk Culture, if passed.

Organize the Societies!

As the law for the encouragement of agriculture has passed, every County in the State should organize a Society, and adopt efficient measures to carry out the purposes of the appropriation. We hope at least to hear that all the Counties in the Western part of the State have done so, and it will give us pleasure to receive a list of the officers of each Society for publication.

Horticultural Meeting.

An adjourned meeting of the friends of Horticulture will be held on Thursday next, May 6th, at 2 o'clock, P. M., in the Lecture Room of the Young Men's Association, for the purpose of organizing a Horticultural Society.

The committee appointed to prepare a constitution will lay their report before the meeting. As most people at this season feel interested more or less in gardening, it is to be expected there will be a numerous attendance.

The Season and the Crops.

The severe frosts of last month have done considerable injury to the late sown wheat in this vicinity, especially on light soils, which *have* by frost. Some pieces we have seen, are entirely destroyed.

We observe accounts from nearly all parts of the country respecting the backwardness of the season, and the scarcity of feed for cattle. One would think a few less seasons would convince every farmer of the necessity and advantage of raising more *root* crops.

A paper from Oneida Co., states, that "seldom has so cold a spring been known, even in this part of the country, so near as we are to the region of perpetual snows. The winter has been so long and severe, that the farmers in the north part of this county have fed out all their hay, and most of the coarse grains and forage are exceedingly scarce. In some parts, cattle are dying for the want of food, and some farmers are selling their cattle at auction, having found it impossi-

ble to furnish the necessary keeping, both on account of its scarcity, and for the want of means to purchase at the present high price of hay. The prospect still is far from affording any encouragement that vegetation will relieve their sufferings. On the hills north, the snow is yet very deep over the entire surface of the country."

The Troy Whig of the 24th April, says, "We learn by a gentleman from Plattsburgh, that loaded teams crossed Lake Champlain at that place on the ice, on Friday last.

"There are three feet of snow only ten miles west of the Lake. The farmers are nearly all out of hay, and their cattle in a starving condition."

INQUIRIES.

Larvæ or Grubs in Cattle.

Messrs. Editors.—Will some of your correspondents please give the public the benefit of their observations concerning *grubs in the back and sides of cattle*? They seem mostly to be found in these animals while low in flesh, in winter and spring, and to vary greatly, both in number and frequency, in different seasons. It is presumable that they are the larvæ of some insect; yet in the absence of proof this must be mere presumption. From our own small experience, we know them to create great annoyance and irritation, fever and emaciation, to cattle, if nothing more.

It is desirable that something be known in regard to their origin and character in natural history, the means of prevention, and what is of still more importance, the means of best obviating the evils resulting from them to our stock.

JAMES H. C. MILLER.

Jackson co. O., Feb. 17, 1841.

Poultry.

Messrs. Editors.—I wish to ask through your valuable paper, the following questions, hoping that some of your correspondents will reply to them.

- 1st. Will hens lay as well when confined as otherwise?
- 2d. Will they lay as well without the male?
- 3d. What kind of fowl will lay best?
- 4th. Will hens lay better in eggs than in rearing chickens?
- 5th. What quantity of feed for a given number, and what kind is best to make them lay?
- 6th. Is there any work written on this subject, and what is it?—the best, I mean. S. H. CLARK.

Mattituck, N. Y., April, 1841.

Culture of Hemp.—A correspondent in Canada asks for information respecting the culture and preparation of hemp.

Culture of Tobacco.—Another asks the same respecting tobacco, in this climate.

Wild Rice.—Mr. P. Hunt of Milford, Mass., has obtained and sown some wild rice, and he requests some reader of the Farmer in Canada or elsewhere, to give information respecting the growth and use of this grain.

Beet Sugar.—If any of our readers made any experiments in the manufacture of sugar from beets the past season, they will oblige us by giving an account of the result.

Will the Managers of the White Pigeon Beet Sugar Co., inform us whether they made any further experiments, and with what results?—**Eds.**

Care for Bog Spavin.—A correspondent has a fine young horse affected with bog (or wind) spavin of 2 or 3 month's duration, and asks what is the most simple and effectual remedy.

¶ The inquirers respecting Silk and Silk Worms, and Flowers and Shrubs, are referred to the numerous articles on these subjects in our last year's volume, which, if not already possessed, can be obtained for 50 cts.

Bounty on Silk.—W. B. B. is informed that the State of New York has not yet passed any law to give a bounty on silk. We only stated that a bill was reported to the Assembly for the purpose.

Extracts from Correspondence.

"A. G. S." of Cayuga co. made, in the spring of 1839, five hundred and thirty pounds of maple sugar from one hundred and twenty-five trees; and in 1840, from one tree, thirteen pounds of sugar, and seven pounds ten ounces of molasses. He decidedly prefers, instead of making sugar into *cakes*, to boil it until it will *grain* so that the impurities will settle to the bottom of the vessel, and the molasses remaining gently poured off.

"A M-r-er county Farmer," (Pa.) says, "My crops for five years have been as follows:—Wheat, 15 to 27 bushels per acre; corn from 40 to 60; oats from 40 to 50; potatoes generally 400 per acre. Our kinds are the Mississippi or Merinos, which will yield 500 bushels per acre, and the *Neshanocks*, not *Mesha-nocks*, as this is the county where these potatoes were first raised by James Gilkey, on *Neshanock creek*."

Culture of Asparagus.

This wholesome and delicious vegetable ought to be cultivated by every family that possesses a few yards of ground. It is a dish that nearly all persons are fond of, and it supplies the table during the most destitute season of the year. A good bed will last fifteen or twenty years, and will bear cutting some twenty times in a season. It occupies but little space, and the trouble and expense of culture is much less than is generally supposed. A bed, five feet by twenty, will contain one hundred roots, and is large enough for a moderate sized family. If good two-years old roots are used, they will bear some cutting the next year after planting.

The following directions will enable any intelligent laborer to form and plant the bed:—

If there is any choice, select a warm location, where the soil is deep and rich, neither wet nor dry; mark out the boundaries of the bed, and dig out the earth to the depth of eighteen inches. (If the location is rather wet, and the bottom hard, dig six inches deeper, and put in six inches of oyster shells or loose stones.) If the top soil is good, lay it on one side, but wheel the poor earth away. Then take well rotted manure and mix it with an equal portion of good earth, and fill up the bed even with the surface; then rake it smooth and place the roots on the top of the ground, twelve inches apart; spread the fibres and fix them in their natural position with the hand; then cover the whole with three or four inches of the mixed compost, smooth it off neatly, and the work is finished.

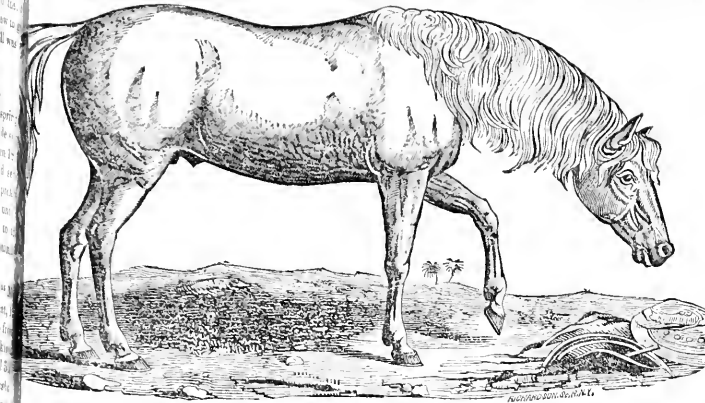
Water the bed after planting, if dry weather succeeds, and keep it clear of weeds during summer. Before setting in of winter, cut off the stalks, and give an annual dressing of two or three inches of manure. The roughest of this should be raked off in the spring, and the surface of the bed loosened with a manure fork.

¶ Fine two-years old roots are for sale at the Seed Store. Price \$1.50 per 100.

Rhubarb, or Pie-Plant.

This is another of the earliest luxuries of the season, and deserves more general cultivation. It is of the easiest possible culture. Plant the roots about three feet apart, in deep rich soil, well manured. A warm border on the south side of a fence, is the best place.

The Early Red variety grows the quickest, and in using requires the least sugar. One dozen roots is sufficient for a family. They are for sale at the Seed Store. Price, 50 cts. per doz.



THE ARABIAN HORSE.

From *Loe's grand work, "Illustrations of the breeds of Domestic Animals."*

(COPIED FROM FARMER'S CABINET.)

The exquisitely beautiful animal, here most faithfully represented, exhibits correctly the form and character of the genuine ARAB. He was taken in an assault by an Arab tribe, on a party of the royal family of Persia, when journeying on a pilgrimage. The chief who headed the attacking party was killed, and his son, a Charger, galloping into the Persian ranks, was taken: a ransom, enormous for so poor a tribe, was subsequently offered by the Arabs, but was refused, and he was brought to England by Sir John McNeil. He made fourteen hands and a half high, is a noble in the highest degree, and so thoroughly trained in that kind of exercise which the Arabians are careful to teach their horses, that he may be galloped round the narrowest circle. When his portrait was in the course of being painted, he was languid from the effects of cold; it was wished to rouse him from his lethargy, and the idea occurred of trying the effects of a few tones of simple music—the sounds no sooner reached his ear than his whole frame instantly became agitated to a violent degree, his heart throbbed convulsively, and so great was his excitement that it was found necessary instantly to stop the music! some chord of feeling, it would seem, had been struck—perhaps he was reminded of his dear home, and his friends and companions, from whom he had been so rudely severed. The generous animal was depicted as scenting the garments and weapons of his slaughtered master, and no one can examine the countenance of his expressive countenance, without experiencing a gust of feeling arising within his breast, in sympathy with the beautiful mourner.

The gentleness of the Arabian horse is proverbial; and although so elegantly formed, and so delicately sleek his skin, even the English horse would perish under the scanty fare, the toils and privations he is doomed to suffer. They are patient of hunger and thirst, to a degree unknown in any other race, subsisting, sometimes, on the withered herbs of the desert, and roots dragged from under the sand, and even on the milk of the camel. They bear continued exposure to the fiercest heats, and day after day pursue marches of incredible toil through the burning sands of the wilderness, forming by their bodies a shade from the fiery heat of the sun, under which their masters repose during the heat for a period in the middle of the day, and a shelter at night. But an Arab never beats, or even speaks harshly to his horse—he treats him as a companion, and his children find in him a playmate, and his wife a nurse for her infant, and all making a pillow of his neck at night. Without the use of the bit, he will obey the slightest motion of his rider; stand at a word, or put himself at full speed in an instant! Such is the creature so happily formed for the scanty herbage, the thirst, and toil of the turning desert.

From the *Mag. of Horticulture.*

Cultivation of the Filbert.

The filbert is one of the finest nuts, and although great quantities of the fruit are imported, and sold in fruit shops annually, there are scarcely any, as yet, cultivated in the United States. A sterile variety of the English filbert may be seen in many of our gardens, which rarely produces any fruit; but the finer sorts, which thrive luxuriantly, and bear most abundantly in this climate, are scarcely known in cultivation. Nothing can well be easier than the cultivation of this shrub or tree, and we are confident that were the merits of the better varieties generally known, no garden would be considered complete without them. A few years since, we imported small plants of the most celebrated English varieties, and have, without the least attention to pruning, realized quite an abundant crop of fine nuts, for two years past, which are quite an acceptable addition to the dessert.

Among the finest of these varieties are the *Frizled*, the *red Kernel*, the *Northampton Prolific*, the *Cobnut*, and the *Cosford*. We have found the *Cosford*, *Frizled*, and the *Northampton Prolific*, the most productive varieties in this climate. All the varieties grow very vigorously in any good soil, naturally dry rather than moist, but a dry gravelly loam, or sandy loam, is considered preferable. In pruning and training filberts, the first most important requisite is to keep the main stem free from all suckers; and the second, to prevent too great a luxuriance of wood, which, if suffered to grow at random, will prevent the production of large crops. The nuts are produced, both upon the

sides of the young wood, and upon lateral spurs, annually produced on the older branches, after the previous year's bearings; lateral shoots have been trimmed away. Abroad, therefore, what is called the *spurting* system of pruning is adopted, and the extremities of the leading shoots are shortened every spring. This throws nearly all the vigor of the tree into the bearing branches, and produces a larger crop of fruit annually.

In some parts of England, large plantations of filberts are made, for profit. Kent is the most celebrated nut growing district, and the average crop there is about eight hundred weight per acre, although, in good soils and favorable seasons, thirty hundred weight have been raised on an acre of ground. The bushes are generally trained with single stems, and the heads pruned in the form of a hoop, kept about six feet high from the ground.

There does not appear to be the least obstacle to the profitable cultivation of the filbert on a large scale, in this country, and our dry fine summers would probably be found more favorable to the productions of large crops, than the moist ones of England. A return of fruit is speedily received after planting on good soils, and we would, with confidence, recommend a trial of a filbert orchard, to enterprising cultivators.

In gardens, a row of the finer sort of this fruit may be advantageously introduced, as a screen or barrier, in portions where such a feature is desirable, as the foliage is large and dense, and thus the double advantage of fruit, and privacy or protection will be realized.

A. J. DOWNING.

Newburgh, N. Y.

THE LATE PRESIDENT.

Our readers will pardon the liberty we take in devoting a small space to the commemoration of an event which has spread sorrow and mourning over this whole land. The death of WILLIAM HENRY HARRISON, whom the sovereign people, by their free will, had so lately chosen to preside over this great nation, has in all places, and from all parties, called forth manifestations of the deepest regret, and most abiding sorrow.

Devout minds cannot but regard this national bereavement as an afflicting dispensation of Divine Providence; and such will willingly comply with the following recommendation of President Tyler, as the most appropriate manner in which a Christian people can commemorate this solemn event.

TO THE PEOPLE OF THE UNITED STATES.

A RECOMMENDATION.

When a Christian people feel themselves to be overtaken by a great public calamity, it becomes them to humble themselves under the dispensation of Divine Providence, to recognize His righteous government over the children of men, to acknowledge His goodness in time past, as well as their own unworthiness, and to supplicate His merciful protection for the future.

The death of WILLIAM HENRY HARRISON, late President of the United States, so soon after his elevation to that high office, is a bereavement peculiarly calculated to be regarded as a heavy affliction, and to impress all minds with a sense of the uncertainty of human things, and of the dependence of nations, as well as of individuals, upon our Heavenly Parent.

I have thought, therefore, that I should be acting in conformity with the general expectation and feelings of community, in recommending, as I now do, to the People of the United States, of every religious denomination, that, according to their several modes and forms of worship, they observe a day of Fasting and Prayer, by such religious services as may be suitable on the occasion; and I recommend Friday, the Fourteenth Day of May next, for that purpose; to the end, that on that day, we may all, with one accord, join in humble and reverential approach to Him, in whose hands we are, invoking him to inspire us with a proper spirit and temper of heart and mind under these frowns of His Providence, and still to bestow His gracious benedictions upon our government and our country.

JOHN TYLER.

Washington, April 13, 1841.

For the New Genesee Farmer.

New Drill Barrow.

Messrs. Editors—To the hundred inventions for planting ruta baga, beet, and other seeds, I must add one of my own, which I have had made, and shall give a trial this spring. If it succeeds, as I think it will, I shall send you a description of it, as I think it will be found the cheapest thing yet of this kind. It consists merely of a seed barrel and two hand wheels, one of which is placed on the axle of a common wheel barrow, by which motion is given to the barrel containing seed; a furrow is opened by a cultivator tooth, the seed is dropped, a chain covers it, and last of all a roller presses the earth upon the seed, and the planting is finished. The advantage of this contrivance is, it can be attached to a common wheel barrow, by taking off the bottom boards. When not wanted as a drill barrow, it can be converted to its legitimate use; and I have found it very handy about the place, in making garden, hot beds, &c.

Yours &c.,

E. B. QUINER.

McIntuckee, W. T., April, 1841.

SILK WORM EGGS.

LARGE White Peanut, and large N-kiku Peanut eggs; (the *Sina Miral*, and *Miraljeanne*, of the French;) and the common Sulphur varieties, are for sale at the Free Store, by BATEHAM & CROSMAN, Rochester, April 1, 1841.

Excrescences on Plum Trees.

In a late journey through some parts of Seneca and Ontario counties, we could not but observe the increase of these unsightly banches on the plum trees, within the past year; and the inquiry came before us, Have these people no eyes? or do they see not that their trees must soon perish unless they lend a helping hand? Branch after branch becomes loaded, the nutriment is turned into other channels, and a general decline must rapidly supervene.

Yet these worms which feed on the best juices of the tree and load it with deformity, are utterly helpless, and live entirely through our forbearance or neglect. No work is more easy than to destroy them, if we go about it in the right way. Let every man that owns a plum tree and wishes to preserve it, cut off every branch on which these excrescences are found, and burn them to prevent the possibility of the insects escaping. We do not expect however, that worms will be found in these old habitations at this season—the perfect insect escaped from them last season; but eggs were most probably deposited again in the same branches; and our object is to have the young worms destroyed. Soon after the receipt of this number of the New Genesee Farmer, begin to watch for new nests, as they will probably appear soon after the tree comes into full leaf. Let the search be thorough, cut them off and burn them without delay, and there will be but few to disturb the tree next year.

We have observed that this insect is generally not much inclined to travel when it can be accommodated near its native spot. Some limbs are more crowded with these banches than others; and we have lately seen several trees standing near together that were ruined; while two or three others at no greater distance than a few rods, were almost exempt from those ravages. We mention this to show that the progress of these insects is moderate—not rushing on in overwhelming numbers like many other insects. Be encouraged then, and go to work.

Our Woollen manufactures prejudiced by the Compromise Act, owing to the duty on fine foreign Wool. Cheap capital and cheap production makes England a creditor nation—not her restrictive measures.

MESSRS. EDITORS—It was an oversight in the framers of our Compromise Act, to make the same reduction in the duties on imported woollens as on any other article; for the reason that England admits foreign wool into her ports at a merely nominal duty of one penny per lb., while the United States puts a prohibitory duty on fine foreign wools.

The low price of wool in Germany enables the English manufacturer to procure his fine stock from thence, much cheaper than it can be procured at home; and as it is imported almost without duty, he can the more successfully compete with our own manufacturers, who are cut off by a high duty from a supply of fine foreign wool. Hence the minimum duty of 20 per cent. on foreign cloths, which under the compromise act is to take effect in 1842, is by no means a sufficient protection for our woollen manufactures against competition from abroad.

In 1824 the duty on foreign wool in England was 6d. sterling, about 11 cts., per lb. But in order to give the woollen manufacturer a boon to compensate him for the effect of our high tariff on British woollens, the British government reduced the duty on foreign wool to one penny per lb. Hence the hardship of the provisions of our compromise act in relation to woollen cloth, as it reduces the duty on foreign fine cloth, without a correspondent reduction of the duty on fine foreign wool.

Should Congress take off the duty on foreign wool, our wool growers would have a right to complain.

What then is to be done for our woollen manufacturers? I reply, revise the compromise act so as to give them that relief which their necessities and the justice of their case demands. Let the advocates of free trade reflect that in a moderate protection extended to our woollen manufactures, they are also extending the wool growers, by giving to this class of our agriculturists that stability of demand, and consequent regular profits, they have never yet enjoyed.

The friends of a high tariff in the United States are continually arguing that England extends towards her manufacturing interests, an almost unlimited protection. On examination we find that out of 1150 articles on which an impost duty is levied, only 20 of them pays a duty for protection—the remaining 1130 paying a duty for revenue only. Is it not rather the cheapness of capital and the low price of labor, rather than a highly protective tariff, which enables England to sell so much, and to become the great creditor nation of both the civilized and pagan world?

Much has been said of late about the prejudicial operation of the English Corn Laws upon the trade of the United States. What right have we to complain of England for thus saving her agricultural interest from utter prostration and ruin, by the free admission of our more cheaply raised productions? We have at least one salvo in our dilemma—the protection England gives to her agriculture is a direct charge upon her manufacturing interests. Manufacturing England, under her corn law restrictions, is a much less dangerous competitor to manufacturing America, than she would be if American bread stuffs were admitted free into English ports.

There is another reason why the reeinding of the English corn laws would fail to give any considerable demand for bread stuffs from the United States. Germany and the north of Europe, can at all times supply England with grain on quite as good, if not better, terms than the United States.

Let farmers then, instead of depending on the devices of legislation, learn to look to their own resources, and "make not haste to be rich." Let them diversify their productions to suit the varied capability of the soil, and the probable state of the markets. If prices are low, so far as the farmer is the consumer of his own productions, he loses nothing. If his surplus does not bring as much as in other times, neither does the manufactured article he needs cost as much. If he owes old debts, he is indeed the loser by the cheapness of the times; but this loss must be chargeable to the year in which the debt was incurred, and not to the present era of exploded humbug and sober reality.

S. W.

From the (London) Gardener's Chronicle of Feb. 27. Trees and Shrubs.

The following list of the newest and most remarkable deciduous trees and shrubs, embraces all the more rare; but many of them are at present extremely rare:—

Legyesteria formosa, a handsome shrub from the North of India, produces its white flowers in August, and makes a pretty appearance with its red bracts which surround the flowers, and large leaves. It is particularly valuable in exposed situations near the sea where the bracts and leaves assume a deeper color.

Paulownia imperialis, a low tree from Japan, in appearance very like *Camelia syriaca*, has beautiful blue-colored flowers.

Cornus macrophylla and [*C.*] *grandis*, handsome shrubs, growing from 10 to 12 feet high—the former from the north of India, and the latter from Mexico.

Caragana Gerardiana, a handsome low shrub with yellow flowers from the north of India.

Cygnus Weldenii, a shrub from Dalmatia, producing spikes of yellow blossoms, like a Laburnum, but the spikes have an ascending direction instead of being pendent.

Spirea Lindleyana, a fine species from the North of India, nearly related to the well known *S. sorbifolia*.

S. cuneifolia, [*S.*] *laxiflora*, [*S.*] *raccinifolia*, and [*S.*] *rotundifolia*, are also from the North of India, and form pretty low shrubs. *S. fissa* from Mexico, is a handsome shrub, growing from 15 to 20 feet high.

Lonicea Ledebourii, a curious plant from California, remarkable for its bright blue berries.

The genus *Philadelphus* has had several accessions from the north of India and Mexico. *P. Gordonianus* from Northwest America, is one of the finest species, bearing its white flowers in great profusion in July, and forming a bush from 8 to 10 feet high. *P. mexicanus* from Mexico, [*P.*] *triflorus* and [*P.*] *montanus* from the North of India, are also desirable plants well adapted for the shrubbery.

Deutzia corymbosa, from the Himalayas, produces white flowers in June.

Berberis coriaria is a handsome species from the north of India, with fine evergreen leaves and yellow flowers.

Coriaria nepalensis is a fine plant for a wall. *Ribes Menziesii* with scarlet flowers from Northwest America, and [*R.*] *glaucum* with white flowers from the North of India, deserve a place in every collection of plants.

Aralia japonica, a curious shrub from Japan, growing from 12 to 20 feet high.

Betula Riparia, a very handsome large tree from the Himalayas, nearly related to the common birch.

Amegadalis incana, a Caucasian species, is extremely ornamental in April, when covered with its bright pink flowers; and in the summer, its light green leaves, covered with white down on the under side, make good contrast when planted among evergreens. *A. Pallasi* from Russia, is also a pretty low shrub.

Clematis Hendersonii, a garden variety [*a hybrid*] is perhaps the handsomest of the genus, producing a profusion of large purple flowers from June to September. It is adapted to covering a bow or trellis work, and if trained umbrella fashion on a lawn, would form a most beautiful object.

Atropa macropetala, a Siberian creeper is by no means unworthy of a place on a wall.

Acer californicum and [*A.*] *Lobeli*, the former a native of Colchis and the latter of Italy, form handsome low trees. *A. Lobeli* is remarkable for the fine purple bloom which covers its young shoots.

Decayed Turnips.

Seeing many inquiries to the cause of the rotting of a turnip crop, without the least appearance of the disease externally, and having had much experience in the raising root-crops of various kinds, I would say, the evil arises from a wet and retentive subsoil. Four years ago I sowed a tresh broken up piece of land with ruta baga; it had been in wood, and this was the first cultivated crop that had been raised upon it. The plants came well, and flourished for a season, when some of them began to turn blue, and they were then soon full of the animal, called familiarly the plant louse; others, however, retained their healthy appearance, while their internal parts were one mass of corruption; and it was curious to observe, on putting one's foot on a large healthy looking turnip, and full of foliage, how evidently the whole superstructure would crush down into complete rottenness, the shell not being more than half an inch in thickness. On examining the top roots of many of them, they were found rotten, although the disease had not extended, in some cases, to within several inches of the bulb, while the cilia via which arose from many, even of the comparatively sound looking roots, was convincing proof of incipient decay. Many of the roots, to appearance perfectly sound, were packed away for winter provender, but I believe I may say, that no one of them proved in reality so, and no cattle would touch them.

The winter following revealed the truth, for, on examining the land, it was found to be full of stagnant water to within a few inches of the surface; since then it has been drained and well cultivated, and I have no idea that the crop of turnips which I intend to grow upon it the present season, will decay on the land. Should they, however, deceive me, I will tell the truth, and inform you of the result, "right or wrong."—*Far. Cub.*

J. STURGES.

From the New England Farmer.

Decayed Turnips.

I observed in the last number of the Farmer, an article from the Farmers' Cabinet, in which it is stated that this disease is the consequence of a wet or too retentive subsoil. That a soil of this description is not suitable to the cultivation of turnips, is generally admitted; but how does Mr. John Sturges account for

rotting of crops on land where there is no such use existing. The "rot," popularly so called, is ten found to prevail on free and light soils as well as those of a more heavy texture, and indeed in situations where there is no substratum for yards, and even below the surface. The farm which I cultivate is a fine sandy loam, and so open that in order to obtain water it is necessary to dig from eighty to ninety et. No water can be obtained in the village short of at distance, but we have often had rotten turnips in cantabundance, even in this soil, as well as on the tops of our emineces, where the soil is so light, that in order to prevent the surface from being washed away by heavy rains and showers we have found it necessary to haul on clay and muck. If Mr. Sturges' theory be correct, the tap-roots of our ruta bagas, like those of the Quia prunus, must be "rather long."—Mr. Sturges assures us that the grub never "attacks the turnips, unless when previously diseased, and until he proves that the tap-root of the ruta baga capable of penetrating a light sandy soil, or earth, to the depth of 80 or 90 feet from the surface, and of tapping upon the stagnant (?) waters of the earth's interior, I shall reject the latter theory, as no less unsatisfactory than the first.

H. D. W.

Wudham, Me., April 5, 1841.

The article from the "Farmers' Cabinet," referred by our correspondent, was as far from being satisfactory to us as to him. But it was an attempt to inhibit the cause of frequent losses of a crop which many of our farmers wish to raise. The attempt was wise-worthy. The matter of rot in the ruta baga is serious evil. If its cause can be ascertained, and its given by which the action of the cause can be soiled, a great good will be conferred upon our community. It will give us pleasure to receive information, or even hints and conjectures, upon the subject, on any of our readers.

We have seen this rot where it was impossible that superabundant moisture in the subsoil could produce it, in one season it prevailed more among that part of the crop which was sowed (about the first of June) upon unfertilized ground, than upon the part manured with a mixture of ground bones and ashes. And more each of these less than in those sowed about the 1st of July. This was in 1838; and the crop that year was not by any means a failure. In 1839, we sowed poor fresh manure from the barn cellar, on the last Wednesday of May. Less than a light manure—subsoil was very dry. This crop was very badly injured. We conjectured that the failure was owing either to the early sowing, or the fresh state of the manure. In 1840, we sowed where the manure had been applied the preceding autumn, and the same evil was experienced.

The season of sowing and the condition and nature of manure or soil, it is not improbable, have influences increasing or diminishing this rot. But what the proper season for sowing is? what the safest soil and subsoil? what the best kind of manure? what stage of decomposition should the manure be in?—these questions our experience and observations cannot answer. We are in the dark. And we put the question distinctly to any man who can, or to any man who thinks he can, answer it.—What is the cause of rot in ruta baga?—Ed. N. E. PAR.

Influence of Solar Eclipses on the Weather.
Extract from "Travels through the Western Country in 1816,"—(By David Thomas.)

"On the day of our arrival in Pittsburgh, we had several thunder showers from the west. The weather then became clear; and for three days we had brisk breezes from the north-west, of unusual severity for summer. The surface of the rivers was rolled into foam, and each night was attended by considerable frost. Indeed, it still continues. (6 mo. 10.)

"It is said here, (as in New York,) that the seasons are much colder than formerly; and the conversation always terminates, whenever the subject is introduced, by a reference to the great eclipse of 1806. At this turn, I have always listened with diminished respect.

"This popular opinion took its rise, from some cool weather, in the summer seasons of 1806 and 1807. A retardment, in the average progress of vegetation, for a few days was deemed cause sufficient to overlook all terrestrial agents for the absorption of heat, and to charge it directly to the moon.

"Of the facility, with which errors not palpable to the senses, may be propagated, we have long been aware; but that men of understanding should adopt this notion, which originated in the grossest ignorance of the causes of eclipses,—is surprising. Such, however, is the case, and to these I offer a few observations.

"The same shadow that attends the moon, has constantly projected its dark cone since the creation. Within every term of a few years, its point has touched the earth; at least twice in every year; our satellites has passed so nearly between us and the sun, as partially to hide it; and once in every month, it has revolved round the earth, and approached as near to us as it did on the day of the great eclipse. These facts testify that admit of no dispute; and the inference is clear and consistent, that, if eclipses affect the weather, the seasons ought to be equalized by such an equality of causes.

"Other views of this subject would justify the assertion, that a solar eclipse has no effect whatever on the atmosphere, except during its continuance. The darkness is nothing but a transient shadow. No reason can be given why the moon, in passing between us and the sun, should produce more extraordinary effects than when the earth rolls between us and the sun. The latter case happens every twenty four hours; and the clearness in clear weather is not only much greater, but the duration of the darkness will average more than three hundred times longer than in other eclipses.

"But every point of view, in which this belief can be placed, shows its absurdity; and whether it be said that a poisonous vapour escaped from the shade of the moon, or that the atmosphere received a shock, the supporters of this doctrine are equally disconcerted.

"It will be proper to inquire, if the seasons have been uniformly colder since the year 1806 than before that period? A correct answer to this question would show that much fallacy attends this popular opinion. Pennsylvania has been subject to summer frosts since its first settlement; not, indeed, very destructive, but sufficient to show that cool weather was frequent. The celebrated DAVID RITTENHOUSE, who resided many years in Narriton, twenty miles north-west of Philadelphia, asserted, "that he had discovered frost at that place in every month of the year except July." He died in 1796.

"This was in times of old. In more modern days, but before the eclipse, I remember a severe frost in some parts of Cayuga, in the 6th month, 1800; and a considerable fall of snow happened at Philadelphia in the 5th month, 1803. Many of the citizens were weakened in the morning, by the crashing of Lombardy poplars, the branches of which were in full leaf, and unable to support the load.

"We will now notice some seasons, since the eclipse, of a different character. The spring of 1808 opened so early, that flax was sown near the Cayuga Lake in the 3d month; and on the first of the 4th month, young cattle were turned to pasture, because there was a sufficiency of grass. The whole summer was unusually pleasant, excepting some extremely hot days. Similar observations were made in the year 1811, one of the most remarkable which the oldest settlers in this country remember. The spring opened about the middle of the 3d month, without any subsequent frost; and the autumn was so fine that its mildness was ascribed to the comet.

"It thus appears, that the popular doctrine of eclipses is inconsistent with reason and contradicted by facts.

"This reference, to which I object, however, comports well with certain operations of the human mind. When two remarkable occurrences in the sky and on the earth, have happened near the same period, the ignorant of all ages, have been subject to believe that one depended on the other. Ancient astronomers arranged the disasters of the times with their accounts of comets and eclipses; and in our own day we have had three remarkable illustrations of this principle. In Eastern Pennsylvania,

—the swift

And perilous lightning, from the angry clouds, were thought by some to be much increased, on the introduction of plaster. To the north-east, the frequency of cold winds, since the great eclipse has been observed beyond all former example; but in the south-western part of the United States, where no great eclipse appeared, some of the old inhabitants declare, that this change of seasons arrived with the Yankees, from the north."

Ripening Peas.

Beurre' Did, as well as some other kinds, require a peculiar mode of management after they are gathered. Two that were beginning to turn black on the lay, were put in a drainer near the fire, where they lay for a week or two. When cut they were perfectly melting and delicious.—Gardener's Chronicle.

To the Ladies.

In our last number we promised to find both the time and mode for ornamental gardening;—and we shall find them both in one intelligent word—inclination.

"We know of one poor woman who lives in a log cabin, does all her own work, takes care of four young children and a baby, for whose support she takes in washing. Yet in front of her door you may see a neatly tended border of flowers,—the seeds bought with a few hard earned pence, and planted and weeded after the tools of day are over, or in a few solemn moments before her children are up in the morning. We remember too, another weak woman, whose windows were curtained on the outside with sordid beams and morning glories; and whose double balsams, marigolds, and sweet peas, often drew a look of admiration towards her otherwise cheerless dwelling. So much for instances among the very poor. Among those to whom fortune has been favorable, we know of one matron, who has reared a large family of children, and whose hands of course were full of domestic care, whose garden and grounds have yet been the admiration and ornament of the neighborhood; and in the wholesome spirit stirring exercise attendant on the cultivation of plants and shrubbery, she has found both recreation and rest when wearied with family cares.

Surely there are instances enough to convince every one that inclination can supply both time and money. The beautiful productions of nature are so abundant, that the poorest can afford the cheap, yet delightful ornament they afford; a dwelling unadorned by their presence, can only be accounted for, by supposing its fair inmates destitute of that love of the beautiful which is one of the most engaging traits in woman.

"We know there are some that affect a distaste for the more common flowers and shrubbery, that any body and every body can have. "Could we afford to keep a green house, say they, "and to purchase plants really worth having, we might feel some interest in the thing; but these every day affairs are not worth the raising." Such show that they have no genuine love and appreciation of the beautiful creations of nature, but regard them merely as matters for ostentation and display. Let the fragrant myrtle, or the splendid pomegranate, once become common flowers, adorning the open field and fringing every brook, and they would henceforth lose every charm in their eyes; and the stupidest cabbage that ever vegetated, might become elegant by becoming so rare that only the possessors of thousands could own it! Those who have a genuine love of nature, must have something; if they can possess the choicest and most elegant, they will have the cheap and the humble, and are thankful that the Author of nature is no aristocrat, but that he has shed a grace and beauty on the more common of his works, far superior to that which adorns the rarer ones.

"We would that we could point our readers to the gardens of some of our female friends, where a very beautiful show of flowers and shrubbery has been created with scarce an item of expense.

"Our friend Mrs. A. is an example—will you walk with us in her shrubbery a few moments? See that noble rose geranium!—it was the growth of a slip sent to her in a bouquet, and cultivated by herself till it has reached its present size—those honeysuckles that entwine the porch, were at first small cuttings taken from the vines of a friend; but Mrs. A. nursed them to their present growth—that white rose, whose snowy blossoms cover one end of the house, was in the beginning a small offset, from the garden of one of her neighbors, but she has cultivated and tended it till it has reached its present maturity—that orange tree performing the air with its blossoms, she raised from the seed and inoculated with her own hands, and so with many others of her choice shrubbery—in like manner the crape myrtles, the oleanders, the dahlias; these splendid ornaments have been sources of very little expense. Mrs. A. does not garden by proxy. After the gardener has once arranged the borders in the spring, the planting and watering and nursing and transplanting is mostly done by herself; and early every morning you may see her in her cottage bonnet and gardening gloves, busy among her shrubbery; and if you will ask her, she will tell you that she gains health and vigor daily by the exercise.

If any of my readers are half persuaded to undertake a like course, we will next month give a few hints as to the laying out and arranging of a garden, and the selection of plants for persons in moderate circumstances.—Western Farmer and Gardener.

For the New Genesee Farmer.

Experiments with Potatoes.

MESSES. EDITORS.—Observing in your first volume, various experiments suggested on the culture of the potato, I have performed the following. I selected ground in my potato lot, the soil a mixture of clay and gravel, a moderate portion of stable manure was put upon the sod, then well ploughed and harrowed, and lightly marked with a small plough, about 3 feet apart and 18 or 20 inches between the hills. They were planted on the 2d of June, the cultivator passed through them, plaster applied, and some time after they were ploughed and hoed. G. S. T.

Eric co. Pa., March, 1841.

1. Pieces one eye only, 21 hills to a row.

1.	5 pieces each hill.	Product 95 lbs.
2.	4 " " " "	" 96 "
3.	3 " " " "	" 90 "

2. Pieces usual size, from the top half of the potato, 16 hills to a row.

1.	pieces each hill.	Product 81 lbs.
2.	3 " " " "	" 83 "
3.	2 " " " "	" 88 "

3. Pieces usual size, from the root half of the potato, 16 hills to a row.

1.	4 pieces each hill.	Product 87 lbs.
2.	3 " " " "	" 87 "
3.	2 " " " "	" 89 "

4. Potatoes ordinary size, the pieces quarters, parings thick, and cut in 4 pieces, 16 hills.

1.	1 whole potato each.	Product 81 lbs.
2.	4 pieces " " "	" 89 "
3.	4 parings " " "	" 72 "

5. Potatoes small; 8 hills.

1.	4 whole ones each.	Product 44 lbs.
2.	3 " " " "	" 43 "
3.	2 " " " "	" 44 "

The above experiments were with Calico potatoes; the following with Scotch Greys.

6. 30 hills to each row.

1.	1 whole one each.	Product 180 lbs.
2.	5 pieces " " "	" 127 "
3.	4 " " " "	" 157 "

REMARKS.—Accurate experiments are always valuable, but they require repetition and considerable variation, to establish any point. For instance, a very slight variation in the soil of each row, may cause a difference in the result, greater than any difference in the mode of planting. Hence in trying one mode, several rows should alternate with each other, and their difference be individually, as well as collectively, compared. Again, in cutting potatoes, whole ones succeed best in dry seasons, in dry soils, or when planted shallow and perhaps cut ones when the opposite is the case. These, and many other circumstances, are to be taken into consideration.

Indian Corn.

MESSES. EDITORS.—I had two pieces of corn; the first two acres were clover sod—the seed the twelve and sixteen rowed, known as the *Stanton* corn; it was put into the ground dry, on the 15th of May, the rows three feet apart each way. During the season I plastered one half, and asked the other once, and went through with the cultivator once each way, and once each way with the plough, followed with a hoe each time. About the 20th of September, the corn was cut up at the roots, and stooked for ripening. After husking and sorting all the small ears, I sold eighty-eight bushels of shelled corn from the two acres. Had I managed it as I did with the other piece, I think I should have got double the crop, with one-half more labor. The other piece, one half acre, was corn stubble of no richer soil than the other; I drew on it fifteen loads of long manure, and spread it equally over the ground; planted it in rows three

feet apart, and eighteen inches in the rows, the same time as the other, and in the same manner. As soon as it was of convenient height I went through it with the cultivator, followed with the hoe, and plastered it; the next time with the plough, followed with the hoe. About the 15th of Sept. I cut up the corn at the roots. After husking and sorting the small ears, I had eighty bushels of ears from the half acre.

Berkshire Pigs.

Major E. Corning brought into our neighborhood, in the town of Hastings, a full blood Berkshire boar, and I, like some of the rest of my neighbors, thought that our native breed was equal to them; but after seeing some of his stock, I purchased a sow that had seven pigs from his boar. The sow was quite small. I fattened her, she weighed only 250 lbs. The pigs I wintered on one-third less feed than I could have done the native breed. On the first of March, I moved into Chynoga county, and drove my pigs; I could have sold them on the way two or three times for six cents per pound, whereas the native breed fetches only three cents. I will give you the result of my pigs when fattened. Very respectfully yours,

WM. K. JOHNSON.

Cato, April 9, 1841.

The Cross Pear.

In the last number of the Magazine of Horticulture, there is an account of this new native variety of the pear, with an outline and description of the fruit, by the editor of that journal. It is supposed to have originated in Newburyport; and bears the name of the proprietor of the garden where it was discovered about fifteen years ago. Our friend R. Manning, whose judgment will not be disputed, has pronounced it without hesitation, "a most excellent fruit;" and the editor says, "The beauty of this pear, together with its abundant and constant bearing, and its melting flesh and perfumed flavor, render it a desirable variety in collections, and one which will rank with the Cushing, Seckel, and others of our finest American kinds."

We copy his description of the fruit:

"Fruit medium size, roundish, two and a half inches in length, and two and a quarter inches in diameter. Stalk three-quarters of an inch long and very thick, inserted in a slight cavity. Eye small, and considerably depressed. Skin smooth, deep yellow, red on the sunny side, very russety round the eye, and covered all over with russety dots, and sprinkled with small black spots. Flesh melting, juicy, and sweet, with a perfumed and agreeable flavor. In eating in December, sometimes earlier (in November) and occasionally keeping till February."

The Season.

Amidst the oft-repeated remarks upon the peculiarity of the season, let us recur to the records of past years for their evidence upon the point.

	1st half	2nd half	month.
Mean temp. of Mar. 1838,	39.53	36.66	mean 33.59
" " " 1839,	32.45	35.60	" 34.02
" " " 1840,	33.98	34.58	" 34.28
" " " 1841,	23.82	23.76	" 28.88
" " " April, 1838,	37.04	37.45	" 37.24
" " " 1839,	48.30	48.87	" 48.58
" " " 1840,	42.86	54.71	" 48.78
" " " 1841,	55.24	45.15	" 40.20

This comparison shows the uncommon cold of March and April. The first half of March was as cold as the mean of February. March 17th, was the coldest morning in the three years past, being 5° below cypher. On the 7th day there fell 14 inches of snow, and on the 13th also 12 inches, and several inches more in the following days, so that the snow was nearly two feet on the level after settling several inches. The birds appeared about the 29th, which

usually come in the first week of March. A shower and some lightning happened on the 27th, at which time the Genesee was high from the melting snow; the change to below freezing point on the 29th, doubtless prevented much desolation.

The first half of April was uncommonly cold; indeed it was not till the 23rd that the mild south wind began to blow upon us, and the flowers, which open in the woods near the beginning of the month, began to appear. Till after this day the grass scarcely showed any signs of returning spring.

April 25, 1840, the temperature was 88°, extremely hot. April 24, 1841, it was 76°. Examination shows the great peculiarity of this season. For the raising of fruit the lateness of the season is considered favorable. At the same time it increases the farmer's expense for the support of his cattle, &c., in no inconsiderable degree.

C. D.

For the New Genesee Farmer.

Education of Farmers' Children—No. 4.

ON REFINEMENT OF MANNERS.

MESSES. EDITOR.—It has been my endeavor to show the necessity of giving more education to our sons, that they may have advantages equal to those of our daughters, and take equal rank with them in society. I was brought up a farmer's son, and rejoice that I know by experience the necessity and virtue of labor and industry. I am able to speak of what I have seen; and can give some reasons for facts which I did not then understand. I saw indeed that the daughters were generally in advance of the sons in all those acquisitions which make an impression upon others, and see the same to hold true at the present day. Besides the greater degree of education in proportion and the greater facility with which the female attains that which is interesting, there is another fact which has far too wide and great an influence for many years, and often through the growth of both.—There is not the same successful moulding of the manners of the sons, nor the same attention to their dress, nor the same introduction of them into society. If there is company at all, the daughters more naturally fall into it, and enjoy its advantages; the sons are in the field, or at work in the garden or yard, and their clothing is suited to their work, and not to visiting or attending on company. The dress of the daughters is often, not of a better kind, but more attractive. The sons, when in early youth, often acquire a distaste for seeing company for these reasons, and avoid far more than is for their good all the means of social improvement thus thrown in their way. Often too, they are associated with hired help of no refinement and improvement, whose influence is pernicious upon their minds in every social respect. It thus happens that youth passes away before they begin to feel the importance and desirableness of society; and their manners and course of life have not fitted them to interest others or to impart to them much pleasure. I know that often the son is in fault, in that he excludes himself far beyond what his parents or his sisters desire, from seeing company and enjoying the benefits of social intercourse. Let, however, the circumstances be considered, and probably there will be found room for improvement on more than one side. The possession of good-breeding, politeness, and good manners, is not made of as much consequence to the son, and in the view of the son. His mind is not impressed with its value in an equal degree. And yet rusticity, coarseness, vulgarity, impoliteness, have no necessary connection with a farm and our agricultural pursuits. The fine nimmers and gentlemanly appearance of many a farmer, who have in some way become exceptions to the too general fact, present us with all the testimony needed in the case. But manners will be rude and coarse, and the appearance unrepresenting

without effort and cultivation and social intercourse. Education, though it naturally places persons in position for the improvement of the personal appearance, will not of itself render one agreeable and interesting in society. Many a scholar is unpollished in his manners compared with many a farmer. We can indeed derive appearances as contrasted with intrinsic worth; but, after all, the maxim of the German is true, "*That every person is to others what he seems to be.*" At the first sight of a person this is almost true; and on intimate acquaintance it is really true. The son that disregards appearances, cares little what his appearance may be to others, inflicts himself a great injury; for he will lend others a lower estimate of him. The parents that are not attentive to the manners and social appearance of their sons and daughters, commit a high injury upon themselves and children. Let there be an equal reserve from coarseness and vulgarity on one side, and an affection and dandyism on the other.

The remedy is obvious to every intelligent farmer. The sons feel the kind transforming influence of a mother, and the father lend his efficient aid in bringing that moulding influence to bear upon the mind. Let not the daughter alone share in this powerful maternal love. Let the benefits of society be enjoyed to all reasonable extent. Let the good influences begin to be exerted early, and let them be continued without intermission. In this particular, *Be not weary in well doing.*" D. C.

Mr. Earl's Stock—Yates Co.

MESSRS. ELLIOTT—I wish to call your attention to all blood Durham calf, belonging to Mr. Jephthah Earl of Cashong, in this county.

Mr. Earl has long been celebrated for his excellent beds of hogs, both Berkshire and Leicester; and he recently has turned his attention to the imported English breeds of cattle. The Durhams are his favorites, and of them he possesses some fine specimens; of the one to which I now shall particularly advert, a bull calf, which, in elegance of form, and symmetry of proportion, approaches, in my opinion, very nearly to perfection. He is of a white color, with a few spots; and has reached his present remarkable size, nothing more than what would be called ordinary attainment, for such an animal. He was accurately weighed a few days ago, in the presence of several persons, and his weight was seven hundred and eight pounds, being, at the time, only seven months and ten days old.

Before sending this to the post, I called on Mr. Earl to get the pedigree of the calf, which I now add.

Comet was bred by Jephthah Earl, sired by Forager, dam, Bullflower.

Forager, dam, Victoria, by Rover. By Rockingham, dam, Cherry, by Wonderful, grand dam by Alfred, gr. gr. dam by Chilton's old red bull.

Bullflower's pedigree extends to North Star, Comet, Henry and Danby. A FARMER.

Benton, Yates co., 1841.

Holkham Hall,

known as the Seat of the Earl of Leicester, better known as "Mr. Coke of Holkham."

In no part of Great Britain is to be found a finer specimen, either of the style of life of a country gentleman, or of the management of a first-rate practical proprietor's estate. In the year 1776, Mr. Coke lived, in the English House of Commons, the discontinuance of the American war, which was carried by a majority of one—and headed a committee to make an address to the King, in pursuance of the vote, his white-top boots and frock—his customary dress—and every American must respect him for the brevity: nor will they regard him the less, when they are told, that every day at his table, during the whole of that barbarous war, he was accustomed to link the health of the greatest man in existence—GENERAL WASHINGTON; and this liberal spirit has al-

ways distinguished the many who, were he now in the House—which his age, 82, prevents—would be, by many years, "the Father of the House of Commons."

The extent of Holkham is about 3500 acres, nearly surrounded by a high brick wall, about ten miles in circuit. This comprises plantations of wood, and a beautiful lake of water, and nothing can appear more rural than its borders, completely over-bowed with forest, and wild as in the depths of some solitude in Michigan. All the woods have been planted—the work of his own hand—the whole estate being plentifully sprinkled with various species of trees, arranged in copices, in acres of forests, and long avenues; so that, instead of a vast park in one body, it is everywhere an ornament and a shelter, over hill and dale, in every direction, in the way of the farmer. Immediately around the mansion are gardens, delightful walks, and a wide extent of velvet lawns on every side; but these are marked by their own schemes of practical utility, for here may be seen the stately pheasant and the graceful deer, that feed and browse and bound about on these soft lawns, and enjoy the seclusion of the cool shades in perfect security.—These are charms to the eye, and exhibit the tasteful elegance of the noble proprietor. Here are woods, too, and while riding through their long winding lanes, one is charmed with the perfume of the forest flowers of most exquisite fragrance, and the clurring and fluttering of birds—the yellow-hammer, with all his gay speckled wing; the shining blue jay, glancing "like the jaylin by," and the wood-pecker "tapping at the hollow beech tree."

The interior lawns are sprinkled over with flocks of sheep—of which more than three thousand are kept—of the famous South-Down breed; and in the pastures are to be seen the fine, sleek, bright-looking Devon cattle, browsing in herds, more than three hundred in number, besides an immense dairy of Scotch cows.—Beyond these pastures, one comes at once into the midst of cultivation, and a ring of this, skirted and sheltered here and there with avenues and copes and trees, encircles the whole estate. Here may be seen a field of one hundred and thirty acres in barley, and her of sixty acres in wheat, with fields of peas twenty-five and twenty-seven acres each; the arable lands being divided about equally between these grains, and turnips and grass, which crops, sometimes having grass for two years, constitute the routine of the succession of tillage on the same ground. There are in cultivation at this time, about four hundred and thirty acres of wheat and barley, each in fine condition; in the steward's estimation, thirty bushels an acre are indifferent crops—forty and fifty, more the "right thing."

It must never be forgotten, that Holkham has literally been made what it is by Mr. Coke. When he succeeded to the estate it was a mere waste; not a tree, nor was it believed that the land would grow them—the only creatures that could exist upon it were rabbits, and they were starving! Now, what a triumph is here! But go into the village of Holkham, which belongs virtually to the estate, and subsists by it in one way or another. Here are five hundred persons probably, with cottages that are a *causality* of rural neatness and comfort; delightful gardens surrounding them, with flowers hanging around the windows and over the doorways! About one hundred and fifty persons are employed on the *Farm* alone; those in the gardens, which are surrounded by a wall one thousand four hundred yards long and fourteen feet high, are perhaps forty more; in the brick-yard twenty; in the smith's shop ten—with carpenters, bricklayers, wheelwrights, game-keepers—a little army of servants without; while in the mansion, besides male servants of every grade, twenty females are employed when the family are present. Women assist in the labour of the farm, in hay and grain harvest, as well as in weeding and hoeing the crops, which are all drilled.

Beyond, and outside the walls of the regular estate, is another plantation of six hundred acres more: here all were hard at work sowing turnips, all the parts of the process going on at the same time—twenty men and boys spreading manure from five or six carts drawn by three horses each (one hundred being kept); half a dozen ploughs with two, without a driver; cast-iron rollers with two; three and four harrows with two; drill machines with two, with harrows again, bringing up the rear. And to crown all, the noble asylum for the old, and schools for the young! Truly this is one of NATURE'S NOBLESSE! Here, the sons of gentlemen come from all quarters to learn the science of agriculture, under the care of the steward, the whole establishment being a model both of the science and practice of farming.—*Boston Transcript.*

Spring.

"This delightful season, after a long and tedious winter, meets its appearance. Bright beautiful Spring I again greet thee with joy, and welcome thee with a smile of delight. The heart of that man must be callous and cold indeed, whose spirits do not sympathize with this delightful season. Poets may well gather inspiration from the clear unclouded light of nature at this season of the year. The song of birds—the bounding of the playful lambs—the green pastures—the budding trees, are objects which have in every age been the theme of the poet's song."

"Say ye that know, ye who have felt and seen,
Springs morning smiles, and soft evening green,
Say, did you give the thrilling transport way?
Did your eye brighten, when young lambs at play,
Leap'd o'er your path with animated pride,
Or grazed in merry clusters by your side?"

Spring is endeared to us by a thousand recollections of our boyhood days—when we wandered o'er hill and dale, or followed the swollen brook to its source, or chased the robin from bough to bough, free as the very air we breathed. Youth may well be styled the spring time of life, the Elixir, the very cream of our existence, but like the seasons it quickly passes away, but not like them, to return."

THE VOICE OF THE SPRING TIME.

BY MARTIN THAYER, JR.

I come! I come! from the flowery South,
With the voice of song and the shout of mirth;
I have wandered far, I have wandered long,
The valleys and hills of the South among;
On woodland and glen, on mountain and moor,
I have smiled as I smiled in days of yore;
In emerald green I have decked them forth,
And I turned again to my home in the North.

I have roved afar through the storied East,
And held on her hills my solemn feast;
Through her cypress groves my voice was heard,
In the music sweet of my favorite bird;
Each plant I have clad in its sunlight arm,
And studded in peace 'neath the desert palm;
A garment of light to the sea I gave,
And melody soft to each rushing wave.

I come! I come! with the song of the thrush,
To wake with its sweetness the morning's blush;
To hang on the hawthorn my blossoms fair,
And strew o'er each field my flowers rare.
The lark, he is up, on his heavenward flight,
And the leaves are all gleam'd with diamonds bright;
The hills are all bathed with purple gold,
And the bleating of flocks is heard from the fold.

Go forth! go forth for the spring time is come,
And makes in the North his bright sunny home;
The sky is his banner—the hills his throne—
Where in sunshine robed, he sits all alone;
In the depths of the woods his footsteps are seen
By each moss-covered rock and leaf-tide stream;
And his voice is heard through each leaf-clad tree,
In the plaint of the dove and the hum of the bee.

Graham's Magazine.

STANZAS.

Why does the rose conceal the thorn,
And faintest fire restraints from us—
Delusive pleasure e'er yields
One half the joy she seems to promise.

Say, why so much coningled is
Life's every scene with joy and sorrow;
To-day our cup o'erflows with bliss,
'Tis filled with woe and tears to-morrow.

'Tis better thus, or we should cling
With madness to time's fading pleasures,
Our heart affections are to bring
Our hearts to seek enduring treasures.
Yes, just enough of grief is given,
To lead earth's wandering sons to heaven.

From the Farmer's Cabinet.

Hessian Fly and other Wreat Insects.

In the last two numbers, 6, and 7, of the current volume, 5, of the Cabinet, and also in some former volumes, several communications have appeared, treating of the Hessian Fly (*cecidomyia destructor* of Say,) but I shall pass them by, inasmuch as the natural history of that insect has, for a considerable time

past, been as clearly ascertained as that of any other whatever. The first publication that I know of, is by General J. H. Cocke of Virginia, dated 1817, which describes the fall deposit; see *American Farmer*, Vol. I., p. 296. The second is by myself, dated 1st February, 1820, also describing the fall deposit; see same work, Vol. II., p. 180. The third is by Dr. Isaac Chapman, communicated to the *Agricultural Society* of Bucks county, 14th August 1820, said to have been written in 1797, stating its appearance in Bucks county in 1786, and its progress for some time afterwards, also describing its several changes and habits; but the Doctor has only noticed two generations, having blended the second and third together; see *Memoirs of the Philadelphia Agricultural Society*, Vol. V. The fourth, by myself, dated 12th February, 1821, which traces the history of the insect throughout the year; see *American Farmer*, Vol. III., p. 187. The fifth is by myself, dated 1st June, 1821; see same volume, p. 218. The sixth is by myself, dated in 1823, treating of the fly and three other insects injurious to the wheat crop, and proposing a remedy; see *Memoirs of the Pennsylvania Agricultural Society*, p. 165.

I refer you to all of the above-mentioned papers, particularly the last; but as many of your readers may not have an opportunity of seeing them, I will transcribe what I deem to be essential.

The Hessian fly, I believe first made its appearance on Long Island, N. Y. in 1776, or soon after the Hessians were there, and is supposed to have been introduced among some straw which they brought with them; hence the name; but the late Judge Peters, that great friend and patron of agriculture, in his notices for a young farmer, says, that the insect was unknown in Hesse, "that its name does not prove its importation, for that appellation was bestowed during our revolutionary excitement, when every thing we disliked was called Hessian. The insect has been accurately described by Mr. Say and Dr. Chapman; but Mr. Say was mistaken in respecting the deposit, as the aperture which he noticed in the sheath of the leaf, was occasioned by the insect passing into the winged state, and not perforated in the act of depositing its eggs. The fly is of a dark color, about the size of the mosquito, and the male much like it except the wings; the body of the female is larger; the wings rest horizontally, and where they join the body are almost pointed, gradually expanding towards the outer end, where they form nearly a semicircle. The egg is scarcely discernible to the naked eye, is oblong, of a pale red or amber color, and placed in the gutter of the leaf, from half an inch to an inch or more from the stalk; the caterpillar, of a pale red color, is hatched in a few days time (according to the state of the weather) and passes down the leaf to its insertion in the stalk, thence between the sheath and stalk, to near the root or joint; it there becomes stationary, feeds on the ep of the plant, and, being blind of fly's covering, is mistaken for the egg. The first deposit takes place from the fifteenth to the last of April (as the season may be) changes to the pupa from the first to the middle of May, and evolves in the winged state, the latter part of that month. The second generation commences from the first to the middle of June; the fly chooses the stunted plants, and deposits both on the top and underneath the upper leaf, and the larvae pass to near the two upper joints, but are found mostly about the upper, and in such numbers as many perish for want of food, the increased number being as disproportionate to the plants which sustain their progress. I have counted upwards of two hundred eggs on a single leaf. The third deposit is made in the middle of the first, and commences about the fifteenth or later in August, and is continued on until cold weather; The irregularity of this generation is occasioned by the various stations in which the pupa of the second is thrown, it is lodged in the straw of the stunted plants, so that in harvesting, much of it is scattered about the stubble-fields and the rest is carried to barns or stacked; such as is early exposed to heat may produce a fourth generation, whilst that which is covered with straw may not give a third.

On observing a fly in the act of depositing, I secured it, and on examination (making the best calculation that I could, and not knowing whether it had deposited any eggs before) I supposed it to contain one hundred eggs; if such be the fact, the first deposit would be one hundred; the second ten thousand, and the third one million, all in the course of one year; happily, however, they have enemies which vastly reduce their number.

The only plants, according to my observations, which are subject to the depredations of the fly, are wheat, rye, and barley; rye, owing to its early spring growth, is not much injured; grain should be sown

(in this climate) about the first day of October, as that sown afterwards suffers more from the winter than the fly.

The only remedy which I have any confidence in, must be applied to the second or summer generation, (it is the only one that I think can be assailed with any prospect of success) whilst in the pupa state, by plunging the stubble-fields before putting in the next crop; in that case, grass seed could not be sown among the grain; but by changing the course of cropping, beginning with wheat, rye, or barley, followed by corn, and ending with oats and grass, the difficulty might be avoided: nor need the stubble be ploughed till towards the first of April, or any time during the winter; plants about stacks and other places must also be attended to; and let it be remembered that farmers must pursue the same plan as it is vain for a few individuals to attempt an object, whilst thousands are united to oppose it. I will further observe, that the surest way to raise a good crop of any grain subject to injury from the fly, is to put the lands in a proper state of cultivation, so where dirt is the case, and when the season proves favorable, little or no damage will be sustained, although the fly may be very numerous, as it certainly is every year. It is folly to sow wheat on a poor soil.

The insect described by Miss Morris is not the Hessian fly, and I think she is mistaken in the manner of depositing its eggs; it appears to be the same as that noticed by me in 1823; it has three generations in the course of a year, and is observed a few days earlier than the Hessian fly, and the same remedy may be applied to both; the spring and fall generations are to be found near the roots of the plants, and the summer are at the several joints. There is another insect lodged in the straw above the upper joint, which causes the premature appearance of ripeness of the head and prevents the grain from forming; it has not yet done much injury, but may hereafter increase.

There is also an insect which attacks the roots of wheat and causes the stunt or sedge; it is probably a species of aphid, and the remedy must be applied to the soil. I would recommend salt or ashes; perhaps lime might be good. JAMES WORTH.

Sharon, March 1, 1811.

The Artesian Well at Paris.

Late accounts from Paris mention the complete success of obtaining water from beneath the beds of chalk which underlay that city, after seven years of assiduous toil, and an expenditure of one hundred and sixty thousand francs. The depth is variously stated—one account makes it 1837 feet. The iron rod of the auger was "as thick as an ordinary axle tree" (just the thickness of a lump of chalk;) and "on the 31st of February," at the moment of withdrawing it, a copious gush of warm water followed. The temperature was 86° of Fahrenheit. Warm baths for public accommodation are to be constructed. The engineer was honored with a decoration, and he is to be employed on three other such wells. Enthusiasm was at its height. Ministers had been to see it. Crowds had carried away portions of the water in vials and bottles, and some had shared themselves in public with the warm fluid!

It has long been supposed that the central parts of the earth consist of melted matter at a high temperature; and experiments in deep mines have invariably shown an increase of heat with an increase of depth. The mines of some countries however, are warmer than the mines of other countries, at similar distances below the surface; and this might be reasonably expected from chasms which allow the heat to rise through them in some places, and from thick masses of solid rock which resist its ascent in other places. In the mines of Cornwall, at 993 feet the water was at 74°; and at 1200 feet at 78°. This shows an increase of one degree to 59½ feet.

It had been calculated however, by Cordier that 51 feet correspond to a degree in France; and that the depth at which water would boil from the natural heat of the earth under the city of Paris, is 212 feet, or nearly a mile and a half.

* Cordier admits this may be twice, or even thrice, as great in one country has another.

In applying this rule for calculation, we must commence with the temperature of the earth near the surface; and if we assume this at 50°, and divide 1837 by 51, the quotient (36) added to 50 will give the observed temperature with great exactness.

Warm springs may therefore only indicate the great depths from which they rise; or they may derive their heat from volcanic action in the neighborhood.

The temperature of the sea, on the contrary decreases with its depth; because if the rocks at the bottom were even at the boiling point, the heat would be speedily carried up to the surface, and colder portions of the water immediately come in contact. The coldness of the sea therefore, constitutes no argument against central heat. But the water under the great basin at Paris could not escape till the reservoir was tapped, and consequently the heat was retained. †

Farmers—their independent condition—their happy exemption from the evils of the times.

Messrs. Editors—Blessed is that man who from his own farm can, by ordinary industry, procure all the comforts and necessities of life, and sleep contented.

Look at the great mass of speculators, and see what is their condition. The country brought to the brink of ruin by their example; new varieties added to crime by their high handed practices; the whole trading and manufacturing community paralyzed or embarrassed, solely by the consequences of their inflations!!!

In excluding farmers from sharing the evils of the times, I do not mean him who has left his legitimate calling to join in speculation, nor him who with the poor ambition for banking, lends his title to fee simple, as if he were only eager to join in the general ruin. But, I repeat, blessed is that man who is contented to receive from his own farm, those comforts which moderate industry never fail to procure. To him alone is permitted the heart to feel, and the eyes to see, the true glory of heaven at night, and the brightness of the earth in the morning. No fevered dream poisons his sleep; no rising sun wakes him to grinding responsibility, diminished self-respect, ruin and disgrace.

If he loves reading and study, rainy days, long evenings, and the hours of relaxation from his daily task, give him sufficient leisure. If he lacks books, the School District Library alone, enlarged as it now is, contains a store house of useful and even scientific knowledge. If he loves agricultural chemistry, his farm is a laboratory in which, with little aid from the schools, he may most delightfully unite the *utile* with the *dulce*. S. W.

The only things in which we can be said to have any property are our actions. Our thoughts may be bad, yet produce no poison; they may be good, yet produce no fruit. Our riches may be taken from us by misfortune, our reputation by malice, our spirits by calamity, our health by disease, our friends by death; but our actions must follow us beyond the grave. These are the only title-deeds of which we cannot be disinherited.—Luton.

From the American Citizen.

British Corn Laws.

Having seen with much satisfaction, several articles in the *American Citizen*, on the oppressive nature of the English Corn Laws, I am induced to send the following tables, taken from an old newspaper which accident lately threw into my hands.

* EXACT CORN LAWS.—The N. Y. Courier says: the following accurate and very valuable table, exhibiting the rate of duty per barrel on flour imported into England, was prepared several years since, by a highly intelligent American merchant, then residing in Liverpool. Its accuracy cannot be questioned, and we consider it a table well worthy of preservation by all who are in any way interested in the exports of bread stuffs to Great Britain, under the present existing Corn Laws of Great Britain. Act 9th, George

barley, the duty on foreign wheat is as follows, when the average price of wheat is at and

per qr.	Duty per qr.	Duty per bbl. on flour,
	s. d.	s. d.
3	1 0	0 7.7.32
3	2 2	1 7.1.4
7	6	4 0.1.8
10	10 8	6 5
13	13 8	8 2.1.32
16	16 8	10 5.0.16
17	18 8	11 2.3.4
20	20 8	12 5.3.16
21	21 8	13 0.13.32
24	22 8	13 7.5.8
23	23 8	14 2.27.32
22	24 8	14 10.1.16
21	25 8	15 5.9.32
20	26 8	16 0
19	27	16 9.23.32
18	28 8	17 2.15.16
17	29	17 10.5.32
16	30 8	18 5.3.8
15	31	19 0.19.32
14	32 8	19 7.26.32
13	33	20 3.1.32
12	34 8	20 10.1.4
11	35	21 5.15.32
10	36 8	22 0.22.32
9	37	22 7.29.32
8	38 8	23 3.1.8
7	39	23 10.11.32
6	40 8	24 5.9.15
5	41	25 0.25.32
4	42 8	25 8
3	43	26 7.7.32

barley and Indian corn, if the average price is under 31s., the duty is 12s. 4d. per imperial bush, and for every 1s. per qr. that it advances, the duty is decreased 1s. 6d., until it reaches 41s. per qr., at which price and upwards, no more than 1s. per qr. is added; and the duty increases in like manner 1s. 6d. for every 1s. as the price declines 1s. or part of 1s. under 41s. per qr.

On wheat, if the average price is 25s. and under 26s. per bush, the duty is 9s. 3d. per qr., decreasing 1s. 6d. for every 1s. as the average price advances 1s. until it reaches 31s., when at that price or more the duty is only 4s. 3d. per qr., and in like manner it is increased 1s. 6d. for every 1s. or part of 1s. per qr. the average price rises below 24s. per qr.

For the convenience of those who do not readily understand quarters and sterling money, I have prepared the following tables, exhibiting the rates of duty on flour in federal money, together with the duty on flour per bbl. in federal money, so arranged that they correspond with the preceding table, and will be at once understood. Thus when wheat is at and over—

bush.	duty per bush.	on flour per bbl.
cts. m.	cts. m.	cts. m.
92.6	02.8	13
99.8	04.9	35.2
99.0	18.5	88.8
94.2	29.6	1 42.4
91.5	37.9	1 51.3
83.7	46.2	2 22.0
55.9	51.8	2 47.9
83.1	57.3	2 75.7
84.4	69.1	2 88.6
77.6	62.9	3 01.6
74.8	65.7	3 14.5
72.0	68.4	3 29.3
69.3	69.4	3 42.2
66.5	74.0	3 55.6
63.7	74.9	3 68.6
60.9	79.5	3 81.1
57.5	89.5	3 95.9
55.4	85.1	4 08.8
52.6	86.0	4 21.8
49.6	90.6	4 34.8
47.1	91.6	4 49.6
44.3	94.9	4 62.5
41.5	97.1	4 75.4
38.7	1 01.7	4 88.4
35.9	1 02.7	5 01.4
33.2	1 07.3	5 16.1
30.4	1 08.2	5 29.1
27.6	1 12.8	5 42.0
24.6	1 13.8	5 55.0
22.1	1 18.4	5 69.6
19.3	1 19.3	5 90.2

From an inspection of the above tables, it will be seen that the duty on flour is 50 per cent. higher than

on grain; consequently shippers generally send wheat in bulk to England, unless the price is very high, when the duty is so small as to make the freightage more than counterbalance the extra duties. At best, however, it is but a hazardous business, and often attended with ruinous loss to American exporters. The extra duty on flour is no doubt intended as a sort of protective tariff to English flour manufacturers, and is abundantly characteristic of English tact and statesmanship. I have no wish to make comments now; the time is coming when this subject will be canvassed in all its parts, and an administration elected that will put forth all its powers to procure either a total repeal of these unjust laws, or such a modification of them as will justify American merchants in seeking the ports of Great Britain as an available market for our increasing surplus of bread stuffs.

J. H. HEDLEY.

Castor Oil Bean--Sun Flower Seed--Cotton Seed Oil.

MESSRS. EDITORS--You ask if the Castor Oil plant will come to full maturity in our climate. As the Ricinus communis castor bean, is a tropical plant, it is hardly probable that it will attain its greatest perfection in our climate. There are many tropical plants which perfect their seed in our climate, without attaining the enlarged growth of the torrid zone.

Half an acre of sun flower seed was planted in this vicinity last season, with the intention of using the crop for oil. The seed was planted on a strong muck soil about the first of June; it grew very large, but continued green until September. When harvested, the fall rains had commenced, hence it was got in in bad order. It was a little neglected, and the seed got mouldy and spoiled.

Had it been planted earlier so as to have been harvested and thrashed with our flax seed crop in August, I think the success of the experiment would have been complete.

I was told by a white lead manufacturer of Pittsburgh, that cotton seed oil, mixed with one-third spirits turpentine, made the best paint oil for inside work; it being much lighter colored than linseed oil. Why would it not answer equally as well for lamp oil, as castor oil mixed in the same manner with spirits turpentine? SENECA

Waterloo, N. Y.

Countervailing Duties.

The effect calculated to be produced by countervailing duties may be seen by the second resolution passed at the meeting of the American Chamber of Commerce held in England on the 2d of March of this year: in which a reduction of duties on the agricultural products of the United States, of flour, rice, tobacco, cotton, and other articles, is recommended, from the anticipation that the tariff in the United States would otherwise be augmented in the course of this year, on the manufactures of Great Britain; this anticipation being founded, doubtless, upon the discussions in the United States as to the soundness of a policy of countervailing duties, with the view of bringing about a more liberal scale of duties on our products in England.—*Nat. Intell.* A. FARNER.

Resolved, That this Chamber, being composed of members deeply interested in furthering the commercial relations between this country and the United States of America, feel it incumbent on them to express their thorough conviction, that unless some important modification of the existing duties takes place in respect to flour, rice, timber, tobacco, cotton, and other articles, the growth of that country, changes in the tariff in the United States will be introduced, in the course of this year, highly injurious to the British interests, and especially detrimental to its principal manufactures.

To Render wood Imperishable and Incombustible.

(FURTHER PARTICULARS.)

We last month gave a somewhat detailed account of the remarkable discoveries made by Dr. Boucherie for preserving wood from decay and combustion. A late number of the London Gardener's Chronicle contains

the following additional information on this important subject, extracted from a pamphlet published by Dr. Boucherie.

"It is obvious that to render a power of preserving timber generally useful, it is necessary not only that the substance to be employed and the means of applying it should be extremely cheap, but also that the former should be perfectly free from all unwholesome qualities. Among the many substances that occurred to Dr. Boucherie was the impure pyrolignite of iron, manufactured abundantly from refuse iron for the use of dyers, which the following experiment led him to believe would be perfectly efficacious. The soft fruit of the melon differs from lead only in the greater quantities of soluble matter which it contains; and as the decay of wood has been ascertained experimentally to be caused principally by its soluble contents, it appeared highly probable that whatever substance would preserve so perishable a vegetable substance as the melon, would a fortiori act with energy upon timber. A melon then was divided into two equal parts, one of which was immediately placed upon a plate, and the other was plunged for a few hours into the pyrolignite, after which it was laid upon a second plate by the side of the first. As usual, the unprepared half speedily became putrid; but the other gradually became dried up, and at last acquired the hardness of wood. Experiments upon saw-dust, beet roots, carrots, and flour, having given the same result, Dr. Boucherie proceeded to apply the pyrolignite to wood. To gain this object completely was his next inquiry. Mere immersion will produce only a superficial effect and to force the pyrolignite into the tissue by means of pressure is too expensive. It occurred to him that the simplest, the most certain, and economical method would be to take advantage of the vital forces of a tree while in full vegetation, and to present the pyrolignite to the lower extremity of the trunk, as if it were felled to be taken up into the circulation. Upon trial, this mode of impregnating the trunk was found perfect; the pyrolignite rising rapidly through all the permeable parts of the timber up to the extremities. The method employed is simple immersion of the lower end cut off, when small arms of trees are to be operated upon; but when the weight of large timber trees prevents their being so treated, without expensive tackle, the following contrivance has been adopted.—At the ground line, a hole is bored, horizontally through the trunk, so as to open a passage from side to side; a coarse-toothed saw is then introduced into the hole, and worked right and left horizontally, until about an inch in thickness remains undivided on either side; by which means nearly all the sap-vessels are cut through, and the trunk remains supported by two opposite points. The wound is then carefully closed externally with pitched cloth, except at one point, through which a pipe passes from a reservoir containing the pyrolignite. A few days in the summer or autumn are sufficient to saturate a large tree, for which purpose pyrolignite to the amount of about one twentieth of the weight of the green wood is required. Timber thus impregnated becomes so hard and tough, as to be very difficult to work.

Having thus ascertained the practicability of introducing substances into the interior of trees without having recourse to any expensive process, Dr. Boucherie turned his attention to the possibility of increasing the elasticity of wood, and of diminishing its combustibility. He found that these most important results could only be arrived at by the use of a deliquescent salt. His experiments taught him that the elasticity of wood is generally in proportion to the quantity of moisture it contains, and that those qualities are universally lost when perfect dryness is produced. Such cases appear to form an exception to this rule, are either dependent upon some particular structure of wood, or upon the alkaline salts which it naturally contains. Moriate of lime, an exceedingly cheap deliquescent salt, was employed with perfect success: a weak solution increases the elasticity and flexibility a little; concentrated solutions render those qualities excessive. Veneers of pine-wood prepared with a concentrated solution of moriate of lime became so pliable, that they could be twisted in any direction, or bent into a perfect spiral, without giving way. It appears probable that the same preparation will render wood durable; but in the absence of proof of this, a fifth part of pyrolignite is added to the moriate. The ensuing splitting, and shrinking of wood, are all prevented by the same means; and what is of much greater moment, its combustible qualities are almost destroyed. Upon this most interesting subject we quote the words of Dr. Boucherie:—"As soon as I had discovered that a certain amount of moisture could be

constantly maintained in wood by the employment of the early mariners, it became easy to conceive that by the same means I should not only diminish very considerably its inflammability, but also render the combustion of its charcoal difficult in consequence of the melting of the emphyseal salts at its surface and in its substance; and so it is. Wood prepared with these salts catches fire with great difficulty, and burns to ashes excessively slowly; so that it may be regarded, for practical purposes, as incombustible. Two cottages (cabins) exactly alike were constructed; the one with prepared, the other with unprepared wood. To set them on fire, an equal quantity of combustibles was employed. The latter was burnt to ashes, while the other was hardly charred, the fire having been unable to maintain itself. These, and other facts lead us to conclude that combustions might be rendered almost impossible, except in consequence of the inflammable materials that houses may contain.

REMARKS.—As some of our readers will doubtless desire to test this subject by experiments, they will naturally inquire, *How the necessary ingredients can be obtained?* We therefore subjoin a few remarks, kindly furnished for the purpose by Professor Dewey.

—**ENOS. N. G. FAR.**

The pyroligneous acid of iron is used chiefly by *calico printers*, and many doubtless be procured in those sections of our country where the manufacture of calicoes is carried on. It may be readily formed too from the pyroligneous acid and fillings of iron. The pyroligneous acid is produced from the distillation of wood, and is a liquid which drops from chimney-stoves when a fire of green or wet wood is burned. A few years ago it was abundant in the northern States under the popular name of *essence of smoke*, and used for the curing of hams, instead of the common process of smoking them. This acid can now be obtained at Messrs. Hawks, druggists, in this city, and probably at other places; and the pyroligneous acid can easily be made (as mentioned in the former article on this subject, p. 52). It would be premature to decide upon the merits of the discovery of Dr. Boncherie. High authority has given it support. The subject deserves a fair and full trial. The pyroligneous acid seems to be recommended for its cheapness. It is not improbable that a solution of coppers will produce the same result; and salt which will not materially be decomposed on mixture, may be still more profitably employed.

REVIEW OF THE MARKETS.

NEW YORK, APRIL 28.

CORN EXCHANGE.—Flour has moved but slowly, and this has been the case generally through the winter; yet the very large stock which was in store last fall has almost all gone off, so that now not more than a ten days' supply remains. The price of Genesee and Ohio is at \$1.91 a bushel, pretty nearly the same as it has been for the last year. Troy is selling freely at \$1.95. Of Michigan there is none. Georgetown sold for exportation at \$1.75; Howard Street is \$1.75. Rye flour, \$2.75 a cwt.; Corn meal, \$2.75 per bushel. Small parcels of Genesee and Ohio Wheat have been sold at 95 cts. per bushel, say 20,000 bushels in all, and 1000 bushels very prime 115 cts. per bushel. Rye and Corn are rather scarce, but the sale of Rye was at 55 cts. this time and interest, but it was demanded on parcels to arrive. Corn closed at the weight, with several sales at that price. There is little change in Ohio; Northern are 30c, Jersey 34c, and Southern 26 c and 27.

SEEDS.—Clover is very dull; 12 berries, not free, sold at 61 cts. lb. Timothy sells at \$3.25 a ton in lots. Some Clover is exporting.

CATTLE MARKET.—April 29.—Beefers—100 at market. 300 were from the South, balance from this State—sales reached to 7.50 at \$7.10, averaging 55 cts. per cwt. with a fair demand.

Cows and C-calves. There were 110 offered, 110 of which were taken at \$20 to \$10 each.

Sheep and Lambs—550 at market, 110 taken; Sheep at \$2 to \$3, an Lamb at \$1.50 to \$2. Good demand.

HAY.—Sales by the load at 75 to 77 cts. per ton.

ENGLAND.

The steam ship Columbia brought Liverpool advices to the 4th ultimo. Foreign Grain and Flour were somewhat depressed in price. A sale of 500 barrels T. S. Flour had been made in London for 48 shillings, being 4 shillings less than the price per barrel since the previous advices. This price, it is said, would not net to the shipper \$4.50 per barrel in New York at the present rate of exchange.

CINCINNATI, APR. 22.

Sales of Flour were made in the canal at \$3.73, which is a slight advance; the receipts were small. The produce market was animated—sales of 30,000 lbs. bacon, big round sold at 14 cts. each; and 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-1099-1100-1101-1102-1103-1104-1105-1106-1107-1108-1109-1110-1111-1112-1113-1114-1115-1116-1117-1118-1119-1120-1121-1122-1123-1124-1125-1126-1127-1128-1129-1130-1131-1132-1133-1134-1135-1136-1137-1138-1139-1140-1141-1142-1143-1144-1145-1146-1147-1148-1149-1150-1151-1152-1153-1154-1155-1156-1157-1158-1159-1160-1161-1162-1163-1164-1165-1166-1167-1168-1169-1170-1171-1172-1173-1174-1175-1176-1177-1178-1179-1180-1181-1182-1183-1184-1185-1186-1187-1188-1189-1190-1191-1192-1193-1194-1195-1196-1197-1198-1199-1200-1201-1202-1203-1204-1205-1206-1207-1208-1209-1210-1211-1212-1213-1214-1215-1216-1217-1218-1219-1220-1221-12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AN APOLOGY.—Our paper was delayed a day or
two this month, by an accident happening to the ma-
chinery connected with the power press on which it
is printed.

To Delinquents.

There is a large amount of small sums due us from
agents and post masters. They will greatly oblige us
by remitting their balances without delay, so that we
need not trouble them with a more particular call.

The State Law—County Societies.

By a reference to the act to promote agriculture, as
published in another column of this paper, it will be
seen, that where no society exists already, the County
Clerk is required to give four weeks' notice of
a public meeting for the purpose of forming one.—
Notices have been given accordingly in a number of
counties, and many societies will doubtless be organi-
zed during the present month. We repeat our re-
quest that the Secretaries will send us a list of their
officers.

Monroe County Society.

The Annual Exhibition of this Society will be held
at Rochester on the 15th and 16th days of October.
The list of premiums, regulations, &c., will be pub-
lished soon, in handbill form, and circulated through-
out the county.

Ontario County.

The Cattle Show and Fair of this Society will be
held at Canandaigua, on the 12th day of October. The
list of premiums and regulations has been published
and circulated.

Genesee County.

This Society will hold its Annual Fair at Alexan-
der on the 13th and 14th days of October. The list
of premiums, &c. has been circulated, and may be
had of the Secretary, C. P. TURNER, Esq., Batavia.

Remedy for the Turnip Fly.

The following simple mode of guarding against the
depredations of the Turnip Fly, if not new, is certainly
not generally known, and may be of great benefit to
some of our readers:

Messrs. EDITORS—It is well known that the great en-
emy of the Ruta Baga (and other turnip) crops is the
small flea or fly that destroys the plants almost as soon as
they appear above ground; and as this crop is becoming
extensively cultivated, it is very important that
some method be devised and made known for guarding
against this insect.

I have long been in the practice of raising Ruta Ba-
gas, and for the past five years have not failed of ob-
taining a good crop. My mode is simply to soak the
seed 24 or 48 hours in *Tanner's Oil*, and then roll it
in plaster to facilitate the sowing. A very small quan-
tity of oil is sufficient, as it is only necessary to moisten
the seed thoroughly, and allow it time to penetrate.
The offensive odor of the oil is imparted to the seed,
and the first leaves of the young plant are so impreg-
nated with it that the flies will not eat them. I have
frequently tried the experiment of sowing a small quan-
tity of seed without any preparation, and have almost
invariably found those plants nearly or quite destroyed,
while those from the prepared seed escaped uninjured.

To the incredulous I would say, the trouble is
but little, the expense nothing—therefore, *try the ex-
periment.*

The oil does not seem in the least to injure the vi-
tality of the seed. I have known it to vegetate well
after soaking *ten days* in the oil; but I think two days
is sufficient, and prefer it to a longer period.

L. B. PARSONS.

Perry, N. Y. May 26, 1841.

Hints for the Month.

Among the most important operations this month, is
the sowing of ruta бага seed. Farmers who want an
excellent and cheap feed for their horses and store cat-
tle, and especially those who have been sadly pinched
this spring for hay, &c. must not omit the proper
season.

But, one thing must be remembered—that ill suc-
cess is nearly always to be attributed to *bad manage-
ment*—and not to the nature of the crop itself. Where
the soil has been well enriched by previous manuring;
is not too wet; has been well mellowed by frequent
ploughings and harrowings; the seed planted as early
as the middle of the month—and rolled smooth where

the surface from the stiffness of the soil may incline
to be cloddy, to prevent the fly—and where the weeds
have been completely destroyed at the outset, and kept
out of the field,—failures have been extremely rare.
Planting in drills, ridging, or sowing broadcast, are of
secondary consideration, though drilling is to be pre-
ferred where practicable; and ridging is useful on
shallow soils, or those inclining to too much moisture.

Of different operations already commenced and in
progress, the following must be closely attended to:—

Keep your beet and carrot crops perfectly free from
weeds, especially when they are young.

Thin them out at proper distances in the row.

Give corn fields early and frequent cultivation.

And remember that *free or early* dressings, to corn,
or any other crop, are quite as cheap as *one tedious*
and laborious one, after the weeds are a foot high and
as thick as grass on a meadow;—

And benefit the crop incomparably more.

And in all work with *hoes*, remember that a touch
on the grindstone, at least once a day, is strict econo-
my, and great comfort to the laborer.

Canada thistles must be mowed before seeding to
prevent spreading;—and to destroy them, keep them
constantly below ground by ploughing or otherwise,
and they will soon be smothered and destroyed.

All other troublesome weeds should be watched,
and destroyed.

Keep in mind the importance of frequently stirring
the soil about cultivated crops—and let all young and
newly transplanted fruit trees be well hoed about, and
kept clear of all grass and weeds.

The Weather of May

It has been no less remarkable than in the preceding
months. The temperature of the first half was 44.98,
of the second half 63.04. Of May 1840, was 50.62,
64.87.

The first half continued to be cool, vegetation made
very slow progress, some trees and plants shot forth
their flowers and their leaves. From Thursday the
20th, when the warm weather began to appear with
some power, vegetation put forth with astonishing ra-
pidity, plums, cherries, apples and quinces followed
in rapid succession, indeed some apple flowers ap-
peared with the late peach blossoms. The some plum trees
which last year blossomed fully on April 26th, were
this year in full bloom May 21st. Some cherries blos-
somed fully in the morning, began to drop their petals
in the afternoon, and the next day showed clearly their
fruit. The leaves and flower stalks of the Horse Ches-
nut burst forth on the 21st, and in four or five days the
blossoms were fully formed. The rapidity with which
the forests were covered with foliage, was unparalleled
in this region. The earth was covered as in a day,
with its verdant carpet. It required constant attention
to keep up with the profusion and variety of the flow-
ers. In *ten days* more the season will be nearly as
forward as usual. The mean temperature of the
month was 45.30, and of 1840 was 57.97. The Bar-
ometer has stood almost at the same point, 29.59, for
the last half of the month. C. DEWEY.

Pear Trees.

We find pear trees in less demand than almost any other article in the nursery. Why should this be so? The pear is one of our most delicious fruits; though from the scarcity of trees in the country, it is not improbable that many cultivators have never tasted the better kinds.

As an excuse for neglecting the pear tree however, we have often heard it said, "they are so long before they begin to bear." Now this is the very reason why they should be planted without delay—why no time should be lost.

The remark however, is only true in part. Some pear trees indeed, like the Bergamot, require much time to get ready; but others, like the Julienne, appear to come into bearing as soon as the apple tree; and this trait of character is certainly of no less importance than the color or the size of the fruit, which pomologists are always so careful to mention. If the time required by each kind to come into bearing, was generally known, purchasers of young trees could be much better accommodated. Delicious sorts would in all cases be wanted, but we could well afford to wait several years for the Summer Rose, the Rouseelette de Reims, or the Belle et Bonne, to grow large and get ready, when Williams' Bon Chretien, the Summer Frankland, or the Bloodgood, were bearing in the mean time. Of 81 sorts noticed by Manning in his "Book of Fruits," 17 are mentioned that "come early into bearing," though several belonging to this class, he has not marked; and at this time we have in the nursery, many trees of the Julienne, not more than six or seven feet high, in full flower. Grafts of this variety, of the Cushing, of the Johnnot, &c. set up on old stocks, bore in two years.

The pear is one of our hardiest fruit trees; and so far as our observations have extended, it is neither subject to the attacks of the caterpillar, nor the borer. Some perish however, with the fire-blight; but it should not be allowed. The owner has as much right to complain of bad luck when he stands by while his cattle are destroying his young trees, as he has when he stands idle, without reaching forth a hand, while *Scolytus pyri* destroys his old trees. Possibly however, there are two kinds of fire-blight; but be this as it may, many of our trees have stood more than twenty years, without any losses of consequence, though the fire-blight has been several times amongst them, growing entirely as we believe, to this circumstance: *we have cut off the dying limb, and burnt it without delay.*

Ripening of Pears.

After selecting the article on this subject from the *Gardener's Chronicle*, which appeared in our last number, we brought two kinds of pears from the cellar, where they had remained all winter as hard as when they were taken from the tree, and placed them in a warm room. In about ten days, one sort which had been as green as grass, changed to a golden yellow, and became melting and delicious. An accident has prevented us from giving the name. The other sort also softened soon after, and was considered fine; but it is clearly a misnomer.

In winters past we have had several kinds of pears in the cellar, that either rotted or were thrown to the pigs in the spring, which we are now satisfied would have ripened in a warm room.

For the New Genesee Farmer.

"Grubs in Cattle."

MESSES. EDITORS.—Perhaps your correspondent, Mr. Miller of Ohio, will find a satisfactory answer to his inquiry on the above subject, in the remarks on "Bots and Horse Bots," in the last two numbers of the Farmer. It is well known that these grubs are the larvæ

of the *gad fly* or *gad-fly*, so often seen on the backs of cattle in summer, the scientific name of which is *Oestrus botis*, or the *Ox-stinger*. The eggs are deposited in the skin, and the larvæ produce considerable swellings on the backs and sides of cattle. They irritate the flesh, and become a disease, often painful, weakening, and concurring to the animal. There is not any preventive of their depredations, or any remedy for their action, which has fallen under my eye. Their effects are much more powerful upon poorer and weaker cattle, and perhaps their eggs are laid with greater ease in such animals, or that they may meet with less resistance from weaker cattle. If such is the fact, the farmer will find the *grand preventive* in the good strength and power of the animal, and the *best remedy* in the good keeping and consequent vigor of his cattle. Let him not winter any inferior animals, either of cattle or sheep, as both these seem more subject to suffering from the larvæ peculiar to them.

Rochester, May, 1841.

C. DEWEY.

From the New England Farmer.

How can Farming be made Profitable?—Subsoil Ploughing.

Letter of E. Phinney, Esq. to A. Huntington, Esq. published in the Transactions of the Essex Agricultural Society, 1840.

A. HUNTINGTON, ESQ.—Dear Sir.—The question is often asked, How can farming be made profitable? I answer, by liberal manuring, deep and thorough ploughing, and clean culture. I will venture to affirm, without fear of contradiction, that no instance can be cited, where a farmer who has manured his grounds highly, made a judicious use of the plough, and cultivated with care, has failed to receive an ample remuneration for the amount invested—any more, that has not received a greater advance upon his outlay than the average profit derived from any other business. One great difficulty is, that most farmers seem not to be aware of the fact, that the greater the outlay, to a reasonable extent, when skillfully applied, the greater will be the profit; they therefore manure sparingly, plough shallow, and the consequence is, get poorly paid for their labor. This has become a prejudice and given a derelict to the business of farming, especially among those who are in the habit and are desirous of realizing something more from their occupation than a naked return of the amount expended.

The farmer who is so sparing of his manure that he can get but thirty bushels of corn from an acre, gets barely enough to pay him for the expense of cultivation; and in addition to this, by the ordinary method of ploughing, his field, at each successive rotation, is deteriorating, his crops becoming less, and in a few years he finds he must abandon his exhausted and worn out fields, to seek a subsistence for himself and family in some other business, or in some other region, where the hand of man has been less wasteful of the bounties of nature.

Instead then of his scanty manuring of ten cart loads to the acre, which will give him but thirty bushels of corn, let him apply thirty tons. This additional twenty loads, at the usual price of manure in this part of the country, will cost him thirty dollars. But he now, instead of thirty bushels of corn, gets sixty bushels, and the increased quantity of stover will more than pay for the excess of labor required in cultivating and harvesting the large crop over that of the small one. He has then added thirty bushels of corn to his usual price of one dollar per bushel, pays him in the first crop for his extra outlay. His acre of land is laid to grass after taking off the corn, and the effect of his twenty loads of additional manuring, will be to give him, at the lowest estimate, three additional tons of hay in the three first years of mowing it, worth fifteen dollars a ton standing in the field. Now look at the result. His thirty dollars expended for extra manuring was paid for in the first year's crop, and at the end of three years more he will have received forty-five dollars profit on his outlay of thirty dollars; and in addition to this, his land is improved, and in much better condition for a second rotation. There is no delusion in this. It is a practical result, of the reality of which any farmer may satisfy himself, who will take the trouble to try the experiment.

From no item of outlays can the farmer derive so ample and so certain a profit, as from his expenditures for manure to a certain extent. This has been most strikingly verified by some of our West Cambridge

farmers. It is not uncommon among some of the farmers in that town, to put on their grounds one hundred dollars' worth of manure to the acre, and in many instances than one, the gross sales of produce from five acres under the plough, have amounted to five thousand dollars in one season. This is the result of high manuring and judicious cultivation of a soil which is exceedingly poor and sandy.

The subject of subsoil ploughing is one upon which there has been little said, and less done, in this part of the country. In all our grounds, except these which are very loose and sandy, there is no doubt that great benefit would be derived from the use of the subsoil plough. In England, the effect of subsoil ploughing in increasing their crops, as stated by some agricultural writers, would seem almost incredible. By the means, the crops in that country have been doubled, and in many instances trebled. The expense however, is stated to be very great—so great, as to be beyond the means of most of our farmers. In one case, the expense of subsoil ploughing on a farm of over five hundred acres, was estimated by the owner to cost a enormous sum of thirteen hundred pounds sterling. This calculation took into consideration the use of a heavy Denston plough, which always required four and in some stiff clays, six horses to work it. I am aware that an implement might be constructed, which, though it might not do the business quite so well, could, nevertheless, be made highly beneficial in the hands of our farmers, and obtained at a far less cost. I am informed that Mr. Bosson, of the Yankee Farmer, has, with a highly praise-worthy zeal in the interest of agriculture, imported from England a subsoil plough, which may be worked with a few powerful teams at an expense commonly in use in that country.

In a climate like our own, which at that season of the year when our crops, particularly our root crop, most need the benefit of moisture that may be derived from deep ploughing, and are most likely to suffer from drought, the use of the subsoil plough would I attended with unquestionable benefit. On a field my own, which had been set to an orchard, and there fore kept under the plough for some years, in attempting to underdrain a part of it that was usually flooded by water in the spring of the year, I noticed what I English call the "upper crust." This lay some inches below the surface, at the depth to which the lar had been usually ploughed, formed by the treading of the oxen and the movements of the plough over it. This I found to be so hard as to be apparently as impenetrable by the roots as a piece of marble, and did not give way to me until, on the cause of the failure, in every measure, of my crop of potatoes the year before. Having discovered what I supposed to be the cause of the failure, I set about devising measures to remedy it.

I have never seen a subsoil plough, there never having been one seen or made in this part of the country. I consulted my ingenious friends, Messrs. Prouty & Mears, and, at my request, they made an instrument of very cheap and simple construction, consisting of a wooden beam, about three inches square, and three feet long, with three tons or tenth of the common cultivator, placed in a direct line in the beam, extending about eight inches below the beam; to this handle were attached similar to the handle of a plough. O trying this by running after the drill plough, I found in my hard stony subsoil, it was quite inadequate to the purpose, being too light and of insufficient strength. I then had one constructed of iron, of a similar plan, but much heavier and stronger. The beam five feet long, three inches square, of white oak, well ironed, with three inches in nearly a right line, made of the best Swedish iron, one and a half inches square, extending twelve inches below the beam, with a spur at the foot, some less than that of the tine of the cultivator, with strong handles and an iron beam extending from each handle to the centre of the beam, by which the balance is easily preserved. This implement, drawn by two yoke of oxen, followed the drill plough in getting in carrots, and performed the work better than I had anticipated. The "upper crust" gave way, the resistance made by the hard gravelly bottom and smaller stones was readily overcome. The earth was loosened in most places twelve or fourteen inches from the surface, and though not so thoroughly pulverized as it probably would have been by a perfect subsoil plough, yet, in my very hard, stony subsoil, I am inclined to believe, that for simple drill husbandry, this will be found to be a valuable substitute for the English subsoil plough. And considering the small price of the implement, and the greater ease with which it is worked, the friction being much lessened by dispensing with the sole, I shall continue to use this until I can find a better. A part of my crop of carrots was sowed upon the same land appropriated for that crop last year; no more manure

as applied than in the previous year, and notwithstanding the severe drought which greatly injured part of our root crops, my crop on this piece of land was nearly double to that of last year. There is no new cause to which I can attribute this great increase of the produce, but the use of my new constructed substitute for a subsoil plough. The soil was stirred to the depth of fourteen inches; by this means the roots of the carrots were enabled to strike deep, and thereby not only find more nourishment, but to overcome, in a great measure, the effects of a very pinching drought.

Lexington, Mass.

Your obt. serv't,
E. PHINNEY.

From Modern Farmer.

American Society of Agriculture.
An Address to the farmers of the United States; to every friend of agricultural improvement; to every citizen of the United States who desires to see elevated the character and standing of the cultivators of American soil.

Most respected and most respectable friends and brothers, give me your attention for a few fleeting moments; your humble brother, who now addresses you, published a suggestion about three years ago, for the purpose of arousing your attention to the subject of forming a National Agricultural Society; that suggestion was then responded to with a hearty good will throughout the country. But action upon the subject has been overwhelmed by the political whirlwind that has swept over our country. In the first fall of the succeeding calm, the proposition to form such a society has been renewed, and with one exception, has met with a cheering "God speed the project." None doubt the utility of the proposed society, yet doubts as there are many who would like to see the object, and aim of the society more fully explained. To such I now offer some of my views, and in doing so, invite you all to give yours; for this is one object of a National Society to interchange our views.

Many warm friends of the measure, who are anxious to see the society in operation, cannot see how it is to be organized. They say, "No doubt if once organized, it would daily increase in strength and usefulness; but it is like a great complicated piece of machinery, of great use and value when once in motion, but very difficult to start." Now, to me there is no difficulty in the way. All that is wanted is a few active engineers to put the machine in motion. Immediate and decided action of a few of the active friends of agricultural improvement, who must assume the responsibility to act as engineers as well as pioneers for the whole Union; and having once given the society an existence, it will flourish and increase in strength just as our political Union has done.

The following plan of organizing the society is suggested to your consideration:

Let as many of the friends of the project as can be induced to do so, meet at the city of Washington, on some day of the autumn of 1841, (the particular day to be hereafter fixed,) and there form a constitution for the society, and elect officers, to wit: a president, a vice president for each state, a recording secretary for each state, county, city and principal town in the United States, a treasurer, and probably a publisher of a national paper, to be called the Journal of the American Society of Agriculture.

The first officers will hold their offices until the next annual meeting, which should be held at the capital of that state which had furnished the greatest number of members at the time when the president of the society should issue his proclamation to convene the second meeting.

The place of each annual meeting should be fixed at the preceding one, in some state other than the one where it was then held, so as to give the members in each state an easier opportunity of attending.

As in the formation of all such associations it is necessary to have some cash funds, are you willing to donate "a mite" to accomplish this great national object?

If so, an opportunity will hereafter be offered you to do so. Upon some of you I hope to make a personal call for that purpose, should it be thought advisable, after due reflection, to proceed in the organization; therefore, I pray you to give this subject your serious consideration.

If you should aid in the formation of this society, will not your children "rise up and bless you?" For one of the first objects of the National Agricultural Society should be to connect with it "the National Agricultural School."

Not such a "National School" as the only one we now have, which has, with too much truth, been cal-

led "a nursery of aristocracy"—where the humble son of a farmer is a truly admitted, and if admitted, what is he taught? Not how to cultivate his mother earth, and make her sons glad; not how to increase life, but the art of destruction, the trade of blood! Such is now your only national school.

Such will not be the only one, in a few short years, if you will lend your energies to form a National Society, whose motto will be, "to elevate the character and standing of the cultivators of the American soil." For when once organized, you will show a united force of many thousands, whose voice will be heard in the halls of Congress demanding our birthright. Be assured we shall be heard. "Let all our energies be concentrated, and we can do any thing in the power of man; but divided and scattered as we are, we spend our forces, as it were, drop by drop; whereas, united we could make us mightier than a torrent." We can, shall we say we will form such a torrent as will overwhelm our political rulers, unless they will do justice to the agricultural class of the community.

As soon as the National Agricultural Society is formed let us ask Congress to appropriate the "Smythsonian fund" of half a million of dollars to establish a National School. If we unite as we should do, our "torrent" will be too strong for time-serving politicians to resist.

I look upon the National Agricultural School as the greatest blessing to flow from the National Society.

But the Journal of the Society will also prove of immense advantage. It will embody a vast amount of matter, useful and interesting to every cultivator in the Union. The most carefully prepared tables of the production of the earth, from every section of the Union will be kept constantly before the reader, totally different from those vehicles of deception, and often fraud upon the farmer, called "prices current." It is by the quantity produced, and the probable demand therefore, that we can understand whether it is for our best interest to sell our crops now, or store them up. At every meeting there would be numbers from every state in the Union, as ready to impart as to receive information.

"All the inducements of the business of a National Society, a National Fair, and a National School," and the honor of being a member of such a society, would be enough, I think, to make us all feel that it would be a greater honor to be elected a state delegate to one of the annual meetings of the National Society than to be elected a member of Congress.

It cannot be expected in this short address, that I should point out all the good that would flow from the action of the proposed society. But if we are convinced that the effect would conduce to the interest and happiness of the great mass of American agriculturists of the Union, let us act, and with spirit too.

And now my friends, one and all, do you approve of the plan of organization? Speak out boldly if you do not. And if you do not object, the leading friends of the measure will fix upon a day for the first meeting, and proceed in the manner proposed.

There has been an argument raised against organizing such a society at present, "because the public mind has not been sufficiently instructed, and does not sufficiently appreciate the advantages of such an association to render it successful."

Now it is on this very account that the friends of the proposed National Society wish to see it established, that the operations thereof may wake up an excitement throughout our "wide scattered population," that shall be the moving cause of changing the "condition of the country."

It is also argued that the failure of several state and county societies is proof that a national one must fail also.

Let me ask if this is a valid argument? This short quotation, in my mind, is sufficient to knock the whole force of the argument into nonentity: "Divided and scattered as we are, we expend our force as it were, drop by drop; whereas united we could make us mightier than a torrent."

The object of all state and county societies has been of a local nature. Their existence has been known only in their own locality, and they have been too weak in numbers to command legislative aid. Who can tell what would have been the effects if all the members of all the local societies in the Union had been attached to one National Society? If all the exertion of all these societies, collectively and individually, had been concentrated upon one object, would it not have formed a "torrent" as mighty, comparatively speaking, as the thundering Niagara? If the nation, instead of individuals, had received all the light of the intelligent minds that have been devoted to these local societies, would it now be said "that the public

mind was not sufficiently enlightened to appreciate the advantages to be derived from a National Society?" If all the money that has been devoted "drop by drop" upon "model farms" and local schools had been concentrated, should we not now have an institution worthy of the great country we inhabit?

If our population be scattered; if "long distances intervene between the most efficient friends of agricultural improvement," so much the more need of forming such a society as shall draw them together in "one strong bond of brotherhood."

Is it a fact "that the time has not yet arrived when such an association can be organized with a reasonable certainty of success?" If such is the fact, I am disappointed in the energy and character of my countrymen.

Once more I call upon you to answer me this question, am I so disappointed in your character? I am a devoted friend to present organization of a National Society of Agriculture, and a National School, that will elevate the character and standing of the cultivators of the American soil.

And your friend and brother,
SOLON ROBINSON.

Like C. H., *loc. cit.*, April 1, 1841.

For the New Garden Farmer.

Letter from Wisconsin.

MESSRS. EDITORS—Among the interesting articles in your paper, none are esteemed more highly, or looked for with more solicitude by me, than those relating to the flower garden and to horticultural products, by your valuable assistant, D. T. He is always entertaining and useful; and I should like to take a peep over his garden fence in a month or two, although our prairies and woodlands can boast of their peerless beauties in the way of flowers, not to be exceeded by those cultivated in eastern gardens. I am not a scientific botanist, but can appreciate well the beauties of Flora. Here many plants grow wild, that are nurtured and esteemed among the florists of the east. I shall make a collection of the most of them and place them in my front garden, and will some future day, do myself the pleasure of sending some of the seeds, &c. to you.

By the way, I see you are making a collection of grasses. I think you could find quite a variety in this country; for we have many varieties growing wild in our meadows and low lands, many of which make very good hay. We have also wild rice in abundance; for you must know that this neighborhood was the residence of the Menominee Indians, or wild rice eaters, as they were called by the French, and a few of whom still linger round their ancient homes.

I wish to inquire what is best to apply to cure a loss of the eye in neat cattle. I have a favorite half blood Durham cow, which last summer had the misfortune to lose her left eye, the sight having all run out. Now I wish to know what to apply to heal over the wound. Will you inform me?
E. B. QUINER.

Milwaukee, W. T.

Large Hogs.

Mr. George Baker, of Edgmont, Delaware county, Pa., slaughtered, on the 10th of March last, a hog which weighed, when dressed, 879 lbs.

Another.

Mr. Philip S. Bishop, of Edgmont, Delaware county, Pa., also slaughtered, on the 30th of March, a hog which weighed, when dressed, 967 lbs. Those two hogs were about 2½ years old, and of common stock; both of one litter. The litter consisted of twenty-three. We challenge the Berkshires to beat this.

A SUBSCRIBER.

The Flowers of Spring.

Some travelers have spoken of the *punctuality* of the seasons in both high and low latitudes, as if the lines there were stretched tight; though we know the oscillation in more temperate climates, is very great. Thus Dr. Clarke says the snow in Russia went off on the day that had been foretold; and Bruce observed a tree in Abyssinia to bloom on the same day for several years. In this country however, in 1834, the flowers of the Japan Quince were "nearly ready to expand" on the first of the fourth month; but in 1841, on the twentieth of the fifth month.

The difference however, is not so great with the apricot. In 1834, it bloomed on the thirteenth of the fourth month—in 1841, on the 10th of the fifth month, showing a difference of only twenty-seven days.

The peach tree blossoms later than the apricot. In 1834, the difference was three days; in 1835, six days; in 1841, ten days. But this delay is easily explained: Cold winds from the north, continued several days, and vegetation was nearly at a stand.

We will now notice flowers that appear earlier in the season.

Erythronium dens-canis from England is a beautiful little plant. One variety has white flowers, others of a reddish purple. It is earlier than our native species, and increases more slowly.

Of *Corydalis*, we think the American species are rather more delicate than those from Siberia. All do best in a shady soil abounding with vegetable earth, particularly *C. formosa*, and *C. nobilis*; but *C. cava*, *C. cucullaria*, and *C. canadensis*, are very pretty in the open border. *C. solida* with us, has not brought its flowers to maturity.

The Crown Imperial is "a thing to wonder at;" but it is splendid as well as curious. Some other species of the same genus (*Fritillaria*) are also interesting. Of these, *F. pyrenaica*, and *F. meleagris*, with brownish variegated flowers, are the finest that we have seen. *F. persica* has very little beauty.

Some species of *Narcissus* are too tender for this climate; but others are very hardy. The Trumpet Major in two varieties, is remarkable for its earliness and the great size of its nectary. The single *Daffodil* is showy, though less so than its double varieties known under the name of *Phoenix*. *N. biflorus* of a yellowish white, is interesting. *N. argustifolius*, and *N. poeticus* with white petals and shallow nectaries tipped with crimson, are very fine; and though nearly allied are sufficiently distinct for both the botanist and the florist.

The Jonquilla are sometimes arranged as a separate group, though belonging to the same genus. These are, the great jonquil (*N. calathinus*) and the common or fragrant jonquil (*N. jonquilla*). The latter has a variety with double flowers.

The Hyacinth is a most desirable plant for its beauty and its fragrance. Its varieties spread into almost every color, though in neither red nor yellow, are the marking intense. Loudon quotes Miller as saying that in his time the Haarlem florist had 2000 varieties; and he adds, that though the passion for this flower had greatly declined, they have still upwards of half that number.

The grape hyacinth and nutmeg hyacinth, both remarkable for their fragrance, are now placed in the genus *Muscari*. The former has small flowers of a rich blue-purple.

The common Tulip is called "the king of florists' flowers;" and certainly ranks among the most splendid. Red, yellow, white, are almost endlessly compounded; while blue, purple, violet, are eschewed. Loudon says a late London catalogue contains more than 640 varieties of this flower.

Another species (*Tulipa turcica*?) has bright yellow flowers, increases from seed, and makes a fine display in the border. It is sufficiently distinct from the common tulip to excite attention.

The *Iris* is a genus that long continues to decorate the garden. Soon after *I. persica* has faded, the purple *I. pumila*, another with light yellow flowers, and a third (*I. cristata*),—come into bloom. The last is the most of a dwarf, but nearly covers the ground as it spreads, and is remarkable for the delicacy of its tints—a light blue finely variegated with purple, white, and yellow.

The trailing species of the *Phlox*, also exhibit masses of bloom; and few spots on earth are finer than those covered by *P. subulata* and *P. stenocephala*. *P. nivalis* appears to be a variety of the latter; and a bank of snow may give some idea of the multitude and whiteness of its blossoms. It requires some protection in winter.

Pulmonaria virginica, a native plant from the alluvial soil of our rivers, eighteen inches high, has large delicate leaves and fine blue flowers suspended from the top of the stem. A white variety is rare, though we have seen it on islands in the Schuylkill, and on the banks of the Tonawanda.

Magnolia abrotata, a shrub from China, blooms when only two or three feet high. It is almost hardy, and quite so in mild winters. The flowers are large, purple on the outside and white within. It is magnificent.

Wheat turning to Chess.

We had hoped to have kept clear of this controversy—we hope so still. Several communications have been received, favoring transmutation, but as they appear to us not only wholly inconclusive, but as not affecting in the least degree the immutability of the law of nature that plants or animals of one genus never change to another, we beg leave to decline their publication, as well as all others which do not amount to a demonstration of such change. In the mean time, we may state two facts, capable of the clearest proof, which may be furnished if necessary, either of which we consider a demonstration that wheat does not turn to chess.

1. No plant, nor animal, has ever been known, to change from one genus to another, as a swan to an eagle, a hen to a humming bird, an elm to a hemlock, or a *Triticum* to a *Bromus*; and to admit such changes would be to throw the beautiful order of Creation into inextricable confusion.

2. There are farms, and regions of country, where chess has been carefully excluded or eradicated, where it does not return, and which it would of course do, if a change occurred.

To those who may be puzzled to explain the frequent appearance of chess where wheat has been injured or destroyed, except by the conclusion that such injured wheat is transformed to chess, we will merely instance a few, out of many facts, to assist them. 1. Chess, like the seeds of many other weeds, will remain for years, without growing, in the soil. 2. It has been seen, when overshadowed by wheat or grass, with a single grain growing on a stem two inches high, ripening and perpetuating its species on the soil, wholly unobserved by a common eye; and when the wheat has been destroyed, it has been seen to shoot up from a single seed, four feet high, and bear thousands of seeds. 3. Seeds of chess, generally escape the teeth of animals, and are scattered with their manure wherever they may pass; and birds may scatter it profusely in the same way, unobserved. 4. Chess, from its insignificant appearance, frequently escapes the eye of the farmer, and is sown by him over his fields, when it might be detected by careful examination, as by spreading it on a table or floor. 5. When allowed a

fair chance, it multiplies with far greater rapidity than wheat, and hence the constant tendency it has to the ascendancy.

And those, who like our correspondent "R." have seen, or heard of, head-of-chess growing out of wheat heads, or on wheat stalks, we would respectfully request to forward them to this office, where they can be seen. It is a little singular that such great curiosities are never preserved; or if they have been in some instances formerly, they have invariably on rigid examination, proved impositions. If any of our correspondents, or any other person, will procure us such specimen, which shall be pronounced by an experienced examiner of plants, such as Prof. Dewey, as a hoax, he shall have one hundred dollars for his trouble with our thanks.

Manufacture of Silk in State Prisons.

It is well known that for several years past numerous memorials have been presented to the Legislature of this State complaining of the mechanical labor performed in the State Prison at Auburn. Gov. Sewar has lately called the attention of the Legislature to this subject, and recommended that the present system be gradually abolished, and the culture and manufacture of silk adopted in its stead. Experiments already tried have shown the practicability of the enterprise, and it would entirely obviate the evils complained of by the mechanics, it appears to us to be a very wise measure. The only difficulty in the way of its immediate success is the want of materials, and this will doubtless soon be obviated. Mr. Polhemus, the Prison Agent, has issued the following notice, which we cheerfully give a place in our columns:

TO FARMERS AND OTHERS.

State Prison, Auburn, N. Y.
May 15th, 1841.

The subscriber as agent of said Prison, having commenced the manufacture of SEWING SILK, by convict labor, will pay three dollars per bushel for all the Cocoons of a good quality that may be offered at this Prison, hereafter. Any communication upon this subject, addressed to the subscriber, (*post paid*), from any part of the United States, will receive immediate attention.

Having become thoroughly satisfied of the fact that the Morus Muliculus Mulberry will endure the frosts of winter in this latitude, without care or attention, nearly, if not quite as well as the common Apple Tree, the subscriber has determined upon extending the business of manufacturing Silk at this prison, to any amount that the procurement of the material will allow; and hopes ultimately to make it the principal employment of the convicts here confined. Under this determination he will be prepared at all times to purchase for cash, at the above price, all the Cocoons of a good quality that may be offered from any part of the United States.

The immense amount of foreign Silks annually imported into the U. S. demonstrates the policy, if not the necessity of a combined effort on the part of the citizens of this country, generally, for the production of American Silk, which when properly fabricated, is believed far exceeds in quality that produced in any other part of the world; hence every individual in the community, from motives of patriotism, as well as interest, should feel a deep solicitude for its culture and success.

It is believed that most farmers will, to a certain extent, find it profitable, so far at least, as the necessary labor in feeding the worms, etc., can be performed by the juvenile members of their families.

The tree may be planted by the fence side and in other unproductive portions of their grounds, to an extent sufficient, after a few year's growth, to produce a large amount of Silk—not is it necessary (as has been supposed) to incur any expense in preparing buildings or fitting up apartments for the feeding of worms—a common barn, or any house of any description will answer all the purposes; hence in particular may be used to great advantage during the early part of the season, previous to the ingathering of the crops.

Being aware that very erroneous opinions are entertained by many in regard to the process of producing

the Coccoon, to obviate which, any person desirous of correct information upon this subject, will be furnished the same gratuitously on application to Mr. J. J. MORRIS, at this prison, who has a thorough knowledge of the business in all its parts, having for many years had the entire charge and superintendence of an extensive silk manufactory in Europe.

HENRY POLHEMUS, Agent.
P. S. Editors of Newspapers in this State who are friendly to a change in the mechanical branches now carried on in our State Prisons, are requested to give the above a gratuitous insertion. H. P. Ag't.

Galvanic Plumb-Protector.

It appears by a late English paper, that a galvanic battery has been successfully employed to guard the Dublin against slugs and snails. Most of our readers will get a correct idea of this apparatus from a tin basin, six inches in diameter, with the bottom out. The material however, must be zinc, surrounded by a band of copper one inch wide, neatly fitted on the outside near the rim, and held up by dots of solder. It is pressed into the ground, so that no insect can crawl under it; and its effect is thus described:

"The mollusca may crawl up the zinc with impunity, but on coming in contact with the copper, will receive a galvanic shock, and immediately turn away, or fall to the ground. I have repeatedly watched them, and have observed they were extremely cautious in approaching a second time.—The apparatus acts in wet or dry weather, and is therefore always in action."

We ought to mention however, that the upper edge of the zinc has an indented flange, turned horizontally outward, just above the copper band.

We have thought of applying this apparatus to the plum tree, &c. to protect the fruit against the entrance. Insects that fly into the trees, of course will not be interrupted; but the curculio, like the snail or the slug in England, is decidedly a crawler. To prevent the hogs from interfering, a guard of thorns or briars may be useful; or perhaps it may be found to act several feet up the trunk, where rags or tow may be stuffed in between the tree and the magic circle. †

Wilkie's Scotch Plough.

John McConell, of Ontario, very justly objects to the want of accuracy, in the statement of the committee on the Worcester trial of ploughs, where they describe the performance of a "Scotch plough," without naming the inventor or manufacturer. If our correspondent will turn to the very full report of that trial, given at the time, by Henry Colman, in the New England Farmer, he will find this deficiency of the committee supplied, and that it was Wilkie's plough, imported, which was there exhibited.

In justice to Wilkie's plough, it may be proper to state, that at the late trial of ploughs, under the direction of the Committee of the Ayrshire Agricultural Society, it accomplished a given quantity of work with more ease than any other, except Ransom's plough, though the latter did its work in a far more imperfect manner than Wilkie's, when the experiment was made on sward land. We do not consider the Worcester trial as at all decisive, as circumstances, and especially differences in the tenacity and condition of the soil, are found to vary the results very materially. We believe however, that experiments of this kind, are the only accurate test of the merits of different ploughs, and we hope they may be repeated with every necessary variation, as in clay and in sand, in sward and in stubble, with wide furrows and narrow, shallow and deep, lapping and flat, and we have no doubt that some which may prove imperfect in one way, may be excellent in another.

Darlington on the Grasses.

We have received from the author, Dr. Darlington, of West Chester, Pa. his "Discourse on the Character, Properties, and Importance to man, of the Natural Family of Plants called Gramineæ, or True Grasses."

[Delivered as a lecture before the class of the Chester County Cabinet of Natural Science, Feb. 19, 1841.]

This little pamphlet contains a large fund of information relative to this very important order of plants, and the high attainments of the author as an American botanist, and the plain and colloquial style of the lecture, render it uncommonly interesting to the young student in botany. With the exception of one instance, where a *mausous* and "pernicious drink" is termed a "rich potation," we have also been pleased with the occasional remarks of a general and moral character contained in it.

N. Y. State Agricultural Society.

We have received a letter from H. S. Randall, Esq. Corresponding Sec'y of the N. Y. State Agricultural Society, complaining of some remarks in our April number, in relation to that Society. Mr. R. thinks our remarks do injustice to its managers, and afford evidence that we labor under erroneous impressions respecting the character of that Society. We cannot consistently publish the whole of the letter, without following it with a lengthy rejoinder; and wishing to avoid all cause of animosity, we prefer to explain, or retract, our remarks, and only give some extracts from the letter.

In the first place, by way of explanation, we remark that the article alluded to, was written in great haste, and under a feeling of considerable disappointment, in view of what appeared to us the meagre appropriation, named in the bill reported to the Legislature—being only one-half of the amount asked in our petitions. In the second place, we wrote under wrong impressions, in supposing the bill was reported before any of our western petitions were received—which we have since learned was not the case. We also supposed that the "N. Y. State Agricultural Society" would, as heretofore, confine its operations mainly to Albany, and be managed chiefly by gentlemen of that vicinity. With these impressions on our mind, and its past history in view, we think it not surprising that we did not cherish the most favorable opinion of the Society, or expect much general good to result from it.

We are happy to say however, that the late proceedings of the Society, and the zeal and public spirit now manifested by its officers, have made a more favorable impression on our minds; and so long as its operations are governed by the principles we believe they now are, the New York State Agricultural Society shall receive our cordial approbation and support; and we think we can safely promise it the good will and co-operation of the majority of our readers in this State.

With the worthy Secretary therefore, we say, "let all bickerings and jealousies be forgotten," among those who labor in this great cause; and let us put forth our united efforts to help on the work of improvement,—let our motto be "Onward for the good of all." Then glorious success, the increase of happiness and prosperity, will surely crown our efforts.

We heartily concur with the sentiments of the following extracts, and hope that we and our readers may be favored with a farther acquaintance with the writer.

"The meetings of the State Society have heretofore been held at Albany, to secure the co-operation of members of the Legislature, and such other business men as resort to the Capitol during the sessions of that body. This might have been an error. But if so, it was one that occupied the notice of the most western members of the Society. * * * The annual Fair is to be held this year at Syracuse. It was placed there on the motion of an individual, who has been for years a member of the State Society—and the vote received the concurrence of every Member of

the Board, residing "about Albany." All that the old members of the State Society demand is respect for their motives,—when it comes to the matter of dollars and cents, they ask no priority—no privileges.—The eastern members will meet their western friends at Syracuse, and compete with them on fair and even terms. Is not this all that can be demanded."

The cause demands that there should be no bickerings—no jealousies in our ranks. The New Genesee Farmer will certainly not be the first to excite dissension and jealousy among friends and co-workers. If there be rivalries between men or periodicals, or sections of country, let it be manifested in a struggle to outvie each other in excellence, in efforts to advance the cause. Instead of destroying each other, let us, like the rivals of old, see who can plunge deepest into the ranks of the enemy!

I have the honor to be, Gentlemen,
Your obt' servant,
HENRY S. RANDALL.

A Tariff on Imports, acting incidentally for Protection, not generally unfavorable to our Foreign Trade.

MESSRS. EDITORS—It strikes me that the protective policy of government towards its own manufactures, when the protection is incidentally given by a tariff for revenue, cannot impair the legitimate importing trade of the country.

We admit that the amount of capital employed in the foreign trade in New York alone amounts to 48,000,000, but if we refer to the statistical details of the articles on which this trade is based, we shall find that our own manufactured articles of cotton, wool, and iron, besides cabinet-ware, upholstery, and the thousand and one other Yankee notions, form a large item in the aggregate amount. It is true that our trade with England and France may be diminished so far as imports are concerned, if our silks, wines, woolen goods, rail road iron, &c. &c. are in part supplied by home production. But will not our trade with all the rest of the world be proportionably increased by it?

Before the protection which the tariff of 1824 gave to our cotton manufacturers, such a thing as an export of American cotton goods was unheard of; but now so great is the export demand for our cotton fabrics, muslins, calicoes, drillings, &c. &c. that the prices of those articles have actually improved of late, when foreign goods are a drug in the market.

Is it sound policy for the north to consume more French silks than they can pay for, in order that the south may sell France a few hundred more bales of cotton? Would not the south be more profitably employed, if in varying her productions, she became less dependent on a fluctuating unsteady foreign market; more free from the effects of competition in the production of a single staple, which of late years has so disastrously effected the pecuniary condition of the Union?

Even the advocates of protection would not oppose the cotton growing, or as they too arrogantly call themselves, the "exporting" states, from exchanging their staples in Europe to any extent they please, for articles solely for their own consumption. If they can buy their negro cloths, woolen and cotton goods, boots, shoes, cabinet-ware, &c. &c., on better terms than the north will exchange with them for their cotton, the north will not complain. But is it right that the north and west, who have no market in England and France for their agricultural staples, to be compelled to support an impoverishing importing trade with those nations, merely to enable the south to export more cotton? In order to import we must first be able to consume; and how can we consume foreign fabrics, if we cannot sell the productions of our own industry?

W. W.

The Wheat Interests.

The name of our paper has become almost synonymous with *wheat growing*; and this being the leading business of at least nine-tenths of our readers, we feel assured that no apology is necessary for the space allowed the following document.

This memorial, with its accompanying statistics, was prepared, with great labor, by JOSHUA LEAVITT, Editor of the N. Y. Emancipator, who, to say nothing of his zealous labors for the abolition of slavery, deserves the thanks of the farming community for his valuable efforts to promote the interests of agriculture. The Senate deemed this memorial worthy of being printed for public distribution; and unless we greatly misjudge, it will do more to open the eyes of the nation on this great subject, than any other paper that has appeared. The complete document is for sale by the author, at the low price of \$1 per hundred; and we hope all of our readers who feel interested in the subject, will not only secure a copy for themselves, but distribute some to their friends.

We regret that our space does not allow us to publish it complete.

MEMORIAL

OF

JOSHUA LEAVITT,

Praying the adoption of measures to secure an equitable and adequate market for American wheat.

IN SENATE, FEBRUARY 27, 1841.

Referred to the Com. on Ag. and ordered to be printed.

To the honorable Senate and House of Representatives of the United States in Congress convened:

The undersigned, a citizen of New Jersey, respectfully solicits the attention of Congress to the following memoir, presenting a few considerations connected with the wheat product of the northwest.

Of the six northwestern states, (including, as such, the two territorial governments, soon to be admitted as states,) of Ohio, Indiana, Illinois, Michigan, Wisconsin, and Iowa, spread over a surface of 236,211 square miles, not including the portions of Wisconsin and Iowa, still held by the Indians. Being situated in a temperate and healthful climate, with the greatest natural facilities for communication abroad, with a soil of amazing fertility, they constitute a region of country as well adapted to the residence, support, improvement, and happiness of man, as any equal portion of the globe. Their present population is 2,669,696, being only 12.6 to a square mile. (* 1, 3.) Of the 175,606,672 acres of land in those states, (excluding Indian lands, as above,) 72,635,414 acres, or 10 per cent., have already passed into private ownership, by sales, grants, or reserves; leaving 105,923,258 acres in the hands of the Federal Government. In the settlement and value of this land, the national treasury has a deep interest, as may be seen in the fact that it has already received the sum of \$73,214,932 from the actual sale of 52,166,414 acres in these states. (2.) The land in private ownership gives 24.5 acres to each inhabitant, and is more by 11,771,414 acres than all the lands in Great Britain and Ireland that is capable of cultivation. (3, 5.) The land actually sold by the Government may be regarded as all bought for cultivation, and exceeds by more than five millions the quantity now under cultivation in the United Kingdom. — The sales in the last eight years are 31,755,666 acres, being only two and a quarter millions less than the lands now cultivated in the island of Great Britain. Of this quantity, 10,069,999 acres, or 31 per cent., were sold in the last four years, since the season of speculation was over; which fact, taken in connection with the vast influx of emigration during the preceding four years, conclusively proves that a much smaller proportion of the land sales of that remarkable period, in these states, were taken for speculation than is generally supposed. At the rate of sales of the whole eight years, the lands in these states would be entirely disposed of in less than twenty years; and at the rate of the last four years, the whole would be sold in sixteen-two years. (4.)

The whole quantity of land in the United Kingdom of Great Britain and Ireland is 77,394,433 acres; of

which 46,922,970, or 60.6 per cent., is cultivated; giving an average of but 1.88 acre to each inhabitant, of the 27,704,118 supposed to be the present population of those islands. Fourteen millions, or 18 per cent., more, are deemed capable of cultivation; leaving 12,744,448 acres, or 20.4 per cent. of the whole, worthless for human subsistence. (5.) At the same rate of productiveness with the cultivated land in the United Kingdom, the land already sold by the Government should produce subsistence for near 39 millions of people, while the vast quantity still unsold admits of a nearly proportionate increase. The lands being all held in fee simple, in farms of sufficient size to insure the greatest product with the least labor, unincumbered with rents, tithes, or poor-laws, and no portion grossed by noblemen's parks or royal forests, the products may be expected to reach this amount far in advance of the proportionate increase of population, providing such a market shall be found for the surplus as will furnish the adequate motives and rewards to industry. It is to this point that the attention of Congress is particularly requested.

The actual increase of population in these states shows that there is something in our land system, our freedom from taxation, and the general character of free institutions, as spread over this region by the benign influence of the ordinance of 17-7, eminently calculated to impart a healthy vigor to a rising empire, beyond any precedent in the history of the world. — Forty years ago, the whole civilized population of this district was but 50,240; now it is 2,670,696. The ratio of increase during each decennial period of this century is 433,202,55, and 102 per cent. The numerical increase of the last ten years is 1,502,654, or more than double the whole increase of England and Wales during the first sixty years of the last century. The increase per cent. is greater than the increase per cent. of England and Wales during the whole of that century.

Of the actual growth of trade it is impossible to speak with equal precision, although some valuable data for an estimate may be found in the appended tables (7, 8, 9.) So great has been the influx of emigrants, that it is only within three or four years that large portions of this district, the best adapted for wheat, have ceased to import bread stuffs, and it is but just now that the actual pressure of a surplus of these products begins to be felt upon the general market of the country; barely suggesting to the wisest forecast what is to be. Let the estimate of the future be formed in view of the tables, and of the facts, that the soil is an fertile as any other, with a smaller portion of waste land, from its more numerous, or swifter, than in any region of equal extent; that there are no barrens; that both soil and climate are inviolable to the production of provisions of all kinds, while at least two-thirds of the whole is eminently adapted to the culture of wheat; that the population is almost exclusively agricultural, with the advantage of owning every man his farm in fee—purchased, too, at so low a rate that no probable reduction of prices can bring their lands down to the original cost, while cultivation is constantly increasing their value, instead of turning them to waste as in some regions; that the character of the people, for industry, skill, education, general intelligence, order, and regard for law, is surpassed by few other sections of the world—affording assurance, that they will always raise as much produce as they can, if there is a market for it, and will always require as much of the products of other regions, in manufactured goods and other comforts, as they can pay for, while their general integrity and the reign of just laws afford a guaranty that they will not run in debt to buy what they cannot see a way to pay for by the products of their labor. — The trade of such a country will be limited only by the physical ability of the people, stimulated to the highest industry by the wants of the most civilized state of society, unless it is clogged by obstructions interposed by the policy of our own or other Governments.

Until the year 1805, wheat chiefly in the form of flour, was the leading article of export from this to foreign countries. The average value for the five years preceding the one named, was \$8,295,000. (10.) In that year, cotton reached the value of \$9,445,500, and took the precedence of wheat, which it has since maintained. The increase since, in the value of domestic products exported yearly, is about fifty-two millions of dollars, the whole of which is in cotton; while the value of wheat and flour has sunk to the fourth place in the columns of exports. The settlement of the wheat region of the northwest, to such an extent as to begin to furnish a surplus, already increases the export of this product; while the prospect for the future calls upon the philosophic statesman and

merchant to look upon this growing interest with the deepest concern.

Wheat flour—from its value, its lightness of freight, capability of preservation, and adaptability to the wants of different countries, as well as the natural indication of the soil and the abundance of water power, either in that country or along the lines of communication with the seaboard,—wheat flour must be the principal reliance of the northwest for foreign export, and the means of paying for articles of necessity or comfort brought from abroad. The more extended introduction of this staple into our foreign trade would not only increase the actual commerce and revenue to the extent, but would tend to relieve our general monetary interests from the severity of the fluctuations arising from the present almost exclusive reliance upon a single staple. But the most advantageous foreign markets for wheat are grievously obstructed, and rendered so uncertain and fluctuating, as to be nearly valueless to the American Farmer, by the corn laws Great Britain and France.

The British corn law, as settled in 1828, by the 5 Geo. IV, c. 60, is one of the most ingenious contrived measures that can well be imagined, calculated to injure the grain-growing interests of other countries, and the grain-raising portions of its own people, without, it is believed, a corresponding advantage to the agricultural interest, for whose benefit was intended. The variable scale of duties, rising the price of grain falls, and falling as the price rises is but little understood in this country. The "general average," as it is called, is declared every Thursday, at the exchequer; and is obtained by first finding the average of all the grains sold during the week ending on the preceding Saturday, at 150 of the principal towns and markets, and then taking an average of it with the five last preceding general averages; and last is the declared or general average for that week. When the declared average of wheat is 73s. or a shilling per quarter of 56 bushels, the duty is 1s. 6 when the price is 72s. or under, the duty is 24s. 6 the intermediate duties being graduated by a scale until, (11, 12.) Wheat and flour may be stored under bond for any length of time, without paying duties, and re-exported at pleasure.

The object of this complicated arrangement is, first to protect the landholder against foreign competition, and keep up the rent of land so as to sustain the loss of taxation imposed by the public debt; secondly, secure the people against the danger of famine, which, from the density of the population, and the uncertainty of the seasons, they are greatly exposed; a thirdly, to prevent, as far as possible, great fluctuations in the price of grain. The attempt to overrule great and irreversible laws of trade, which strike balance between demand and supply—or, in other words, to prevent fluctuations in a market where demand was constant and the supply variable—can not but fail. Twenty years ago, it was considered that a deficiency of one-tenth in the harvest would raise the price of wheat three-tenths, and a deficiency of one-third would treble the price. This thermometer sensibility of the market increases, as the increase of population overpasses the increase of production. The yearly consumption of all kinds of grain in Great Britain, is estimated at 52 million quarters equal to 416 millions of bushels, or 15 bushels to each inhabitant; of which 13 millions of quarters, or 1 million bushels, being 33 bushels to each inhabitant is wheat. The supply of 43 millions, or nearly per cent., in 1830, was at an average price of 70 which was 80 per cent. above the price in 1855, at nearly 50 per cent. above that of 1836. (14, 16.) In the years, 1829 to 1838, the yearly range between the highest and lowest weekly average, averaged 15 1/4d., equal to 30 per cent. The greatest fluctuations were in 1828, rising from 52s. to 78s. 4d., making a range of 50 per cent. These fluctuations of the market in England produce still more disastrous fluctuations in the markets from which supplies are to be drawn. In the ten years above named, the year fluctuations were 54 per cent. on an average; and in 1838, the fluctuation was 154 per cent. (13.)

In those ten years, prices ranged from 76s. to 78 1/4d., a range of 12s. 4d., or 118 per cent. The average of the whole is about 56s. In 1828, the price rose, between 28th September and 24th October, from 68s. 6d. to 76s. 6d.—eight shillings in four weeks. In 1829, it fell, between 6th August and 17th September, from 71s. 6d. to 55s. 4d. or 2s. 8d. a week. The general weekly averages, taken year by year, vary, on an average, 1s. per week; and the weekly reports of a single market, (Liverpool, for instance) fluctuate up and down, on an average, about 1s. 6d.

* The figures in parenthesis refer to numerical tables appended to the memorial, which we are obliged to omit. — EDS. N. G. FARMER.

per week per quarter, equal to $4\frac{1}{2}$ cents in a bushel of wheat, or \$2.31 a year.

The commercial effect of this system has been to encourage speculation. The moment a deficiency appears in the slightest degree, the grain dealers naturally withhold their stock on hand from the market; orders are sent to the continent for grain, to be imported in bond, to be entered as soon as the full of duties will answer; prices are rushed up by all the arts of trade; and, as soon as the duty sinks to the desired rates, (say 6s. 8d.) the whole stock in bond is entered for consumption, and thus added to the general stock; and, if the deficiency proves imaginary, or small, prices fall as rapidly as they rose before, the duty runs up again, and the speculation have received the whole benefit. Thus a gambling class is imported to trade, as detrimental to commercial morals as to the general prosperity. From July, 1828, to December, 1828, the quantity entered was 6,788,880 quarters, of which 5,088,946, or 75 per cent., paid duties not exceeding 6s. 8d.; and in this, 3,225,263 or nearly 50 per cent. of the whole quantity, paid only 1s. duty. In the year 1837, there were entered for consumption, 2,379,393 quarters wheat, and 4,140,787 hundred weight of flour, paying duties to the amount of £306,561. In the year 1838, there were entered 1,740,896 quarters wheat and 392,837 cwt. flour—being more than seven times the quantity of wheat, and nearly ten times the quantity of flour entered the preceding year, paying only £146,533 duties, or less than 50 per cent.; whereas, had the rate of the duty been equal to last year, the duty in the latter would have been £2,333,129. From 1st September, 1828, to 30th November, 1829, duty was paid on 4,532,651 quarters wheat, the prices ranging in the time from 1s. 10d. to 2s. 4d., and the duties ranging from 1s to 20s. 8d.; but the average of duties was under 3s. 7d. (15, 16.)

The tendency of this system to general impoverishment, and to the increase of misery and discontent among the poorer classes, is already awakening intense observation in Great Britain. The manufacturers stop work, because orders do not come from America; and the orders are not sent, because that which payment might be made to a large amount will not be received on any just and reasonable terms. The goods are wanted here, and our free industry is abundantly able to produce the means of payment; but the great barrier of the tariff is under an interdiction. The operatives are thrown out of employment, and reduced to the lowest means of subsistence, and unable to consume a full measure of the products of agriculture, and thousands are made paupers, and become an absolute charge upon the land. The consumption of agricultural products is diminished; the agricultural laborers share the common distress; and agriculture itself, the very object sought to be benefited by this unnatural arrangement is oppressed by its own protection.—It is demonstrable that a well-employed, well-paid, well-fed, prosperous community of operatives would consume and pay for more agricultural products, in addition to the wheat they might import from America, than a depressed and starving community would without the wheat.

The best authorities agree that a very large proportion of the misery which we hear of among the factory children, is the result of the corn laws: first diminishing the employment and wages of the present, and then raising the price of his provisions until sheer want drives him to sacrifice his children for bread! Thus, while we are wanting goods, (not, indeed, the necessities of life, but the comforts of civilized and refined life,) our national revenue falling short, and our granaries bursting with abundance, England's mills are standing still, and her poor perishing with hunger.—Surely the common instincts of our nature, the enlightened and philosophic benevolence which regards human happiness as the great object of human society and government, require a faithful examination of this system by all nations.

The question, where Great Britain is to look for supplies of wheat to meet either the occasional though frequent deficiencies of her harvests, arising from her uncertain climate; or the regular demand, not now very distant, caused by the increase of population beyond production, is one highly exciting the attention of her statesmen and political economists. The British colonies are an unsafe reliance, because it is supposed they have already reached their maximum. Ireland, from which large quantities of grain have been brought, is now in process of a great moral and social revolution, which, by enabling every peasant to eat his daily bread, will not only furnish a home market for Irish wheat, but ere long, create a demand for American flour in exchange for Irish linen. The quantity

of wheat brought from Ireland in 1832 was 552,740 quarters; in 1839, but 90,609 quarters. (14.) The Black Sea is another source, but the wheat is of inferior quality; and goods are taken in payment, leaving the balance to be met with specie; the voyage is long, and wheat very likely to be injured; and the cost of freight enormously disproportioned—the cost of freight and charges from Odessa being from 16s. to 18s. per quarter. The six northwestern states of this Union, with their present products, consumption of goods, and capability of increase, exactly meet the exigency. The examinations made by the persons employed last year in taking the census, show that the product of wheat in those states, excluding Wisconsin, in the year 1839, was 25,211,607 bushels, equal to 8.6 bushels to each inhabitant; of Indian corn, 87,620,465 bushels, or 20.8 to each inhabitant; of other kinds of grain, 29,735,202 bushels, or 10 to each inhabitant; and the total of all kinds of grain was 145 bushels to each inhabitant. There can be no doubt that the products of 1840 were very much greater than this; but there are no means of ascertaining the extent of the increase. In some extensive sections it has been estimated at one-fourth, and even one-third. The wheat crop of the whole United States, (excepting North Carolina and Kentucky,) was 75,995,787 bushels, or 5 bushels to each person; and of Indian corn, the crop was 301,947,458 bushels, or 20 bushels to each person. (17.)

If we now turn again to the six northwestern states and the greatest interests of the Union, we shall find that one of those countries with a sufficient population to supply the social organization. Without requiring that they should be made as populous as England, with her 204 inhabitants to a square mile, it may be safely assumed that the structure of society will not be rendered complete, in a country so destitute of mountains and waste lands, with a less population than 50 to a square mile; of this number, they now have but a quarter. Any policy, of course of events, which hinders the influx of population, is therefore calculated to protract the period of comparative unorganization.

In addition, those states have burdened themselves with heavy debts,—all incurred for the purpose of making roads, canals, and railways. All these improvements were calculated with reference to the conveyance of the products of the soil to markets out of their borders, and all converging, in effect, towards the great Atlantic seaports, whence those products would seek a European market. The stocks of these states are greatly discredited,—chiefly, it is believed, through the unfortunate neglect of a well established axiom in finance, which forbids the creation of a public debt, without a specific pledge of revenue, from taxes or some other source, sufficient to prevent the accumulation of interest. And even now, the states are reluctant to tax themselves, and greatly injuring the country by delay, because they do not see a fair prospect of sale for the products of their land, which is all they have to sell. And how are they to acquire the means of paying the taxes necessary to sustain these stocks, unless they have a market for their supplies? And how are these public improvements ever to pay for themselves, unless the produce of the country can be carried on them? And whether shall it be carried, if there is to be no foreign market?

The Federal Government has expended more than a million of dollars in creating artificial harbors on the upper lakes; and two or three millions more are required to complete them in such a way, that what has been done shall not be destroyed. In addition, harbors are required by the most urgent necessity, along the coasts of Lake Michigan, now, for hundreds of miles, destitute of a shelter for shipping. These works are all standing still, because the revenue is short; while the tooth of Time is rapidly consuming the unfinished constructions. (18.)

Should it, indeed, come to be settled that there is to be no foreign market for these products, the fine country under contemplation is not, therefore, to be despaired of. Let the necessity once become apparent, and there will be but one mind among the people of the North-West. The same patriotism which carried our fathers through the self-denying non-importation agreements of the Revolution, will produce a fixed determination to build up a home market at every sacrifice. And it can be done. What has been done already in the way of manufactures, shows that it can be done. The recent application of the hot-blast with anthracite coal to the making of iron, and the discovery of a mine of natural steel, would be auxiliaries of immense value. We could draw to our factories the best workmen of Europe, attracted less by the temptation of wages, than by the desire to leave liberty and

land as the inheritance of their children. But it would take a long time to build up a manufacturing interest adequate to supply the wants of the N. West, or to consume the produce of those wide fields; and the burden of taxation for internal improvements, uncompleted and unproductive, would be very heavy and hard to bear, and all the population that is concentrated upon manufactures, is so much kept back from the occupation of the effects of the curtailment of imports and the cessation of land sales; and the amount of misery which the loss of the American market would occasion to the starving operatives and factory children on the other side of the Atlantic, is worthy to be taken into the account, by every statesman who has not forgotten that he is a man.

On the other hand, let it be supposed for a moment, that the landholders of England would be satisfied with a fixed and moderate duty, in addition to the protection afforded by the cost of freight and importation, now amounting to 30 per cent. of the net proceeds. There would then be a constant market for wheat in England, to which the uncommonly uniform climate of the North West would furnish a constant and full supply; and the whole returns would be required in British manufactured goods, generally of the description that yield the greatest profit. Immediately, orders would go from this country to set every wheel, and spindle, and hammer in motion. Immediately, these states would be willing to tax themselves for the interest of the public debt, because they would see how taxes could be paid. Immediately, the state stock would rise, because the interest would be secured, with a certainty that the public works would be completed and rendered productive. The manufacturing industry of England, and the agricultural industry of the North West, would be stimulated to the highest productiveness, by the heat of all encouragement—the hope a fair reward. The great cotton staple, too, would feel the benefit of a new and healthy impulse given to trade. The public works would be finished, and the lines of communication now open would be thronged with freight. New York would abolish the duty on salt, for the sake of securing to her own enlarged canal the transportation of the produce from the Ohio, the Maumee, the Wabash, the Illinois, and the Wisconsin canals, now strongly tending in that direction. (19.)

The demand for the public lands would pour a steady stream into the national treasury on the one hand; to be met by a current from the imports on the other, furnishing an adequate revenue for the completion of our harbor works and national defence. The exports, no longer confined to a single staple, and drawn from the most productive of all branches of labor—the cultivation of a rich soil that costs next to nothing—would keep foreign exchanges in a healthy state; new ties of mutual advantage, and new inducements to mutual justice, forbearance, and peace, would arise between two nations of common origin, from whose influence the world has so much to hope for; our own manufactures would be left, under their present protection, to a healthy and natural growth with the growth of the country; and our nation would be saved from another tariff controversy, to occupy and embitter the debates of another political generation.

Are not these objects worthy of the consideration of American statesmen? May an obscure citizen, who loves his country, be pardoned for his presumption in spreading these imperfect suggestions before the American Senate?

Your memorialist respectfully requests that useful information may be collected and diffused respecting the wheat product of the North West; the condition and extent of the foreign market now open for American wheat and flour; the obstructions interposed by the regulations of foreign governments, and the probability of any repeal or modification of those regulations; and that Congress will adopt such measures as shall be deemed wise and proper, to secure an equitable and adequate market for this valuable product.

Your memorialist has prepared, from the best materials in his reach, with some labor, a number of tables illustrative of several of the topics in this memoir, which are appended hereto.

JOSHUA LEAVITT.

Washington City, Feb. 25, 1841.

It is moral excellence alone that renders a free people great and happy. Without it, all is empty splendor and hollow decency. Religion is the source of most of the moral excellence of the race. Its influence, when pure and liberal, is the most wholesome and exalting.



ROCHESTER, JUNE, 1841.

Cheering Prospects.

It is highly gratifying to observe so many signs of returning prosperity, as we think we do at present. The unusual interests which is now awakening throughout the land on the subject of agriculture and domestic industry; the expected modification of the American tariff and of the English corn laws; and last, though not least, the smiles of Divine Providence, in sending us warm and favorable weather and promising crops, is certainly calculated to drive away the gloom and despondency which have enshrouded the minds of too many farmers of late, and to fill their hearts with hope and cheerfulness.

To our Friends.

This number completes the first half of our present volume; and the friends of the New Genesee Farmer, who have labored so efficiently to increase its circulation and promote its usefulness, will be gratified to learn that complete success has attended their efforts. Our circulation exceeds our most sanguine expectations, being now 17,000; and before the close of the season it will doubtless exhaust our edition.

We are conscious that this result is to be attributed mainly to the favor and aid which the paper has received from the friends of the cause throughout the country; and while we express our sincere gratitude, we desire to assure them that no reasonable pains shall be spared on our part to merit their continued confidence and aid.

We regret that a pressure of other business, together with some poor health, has prevented us from bestowing that amount of time and attention to the Farmer and its correspondents, which we could wish. We intend to make better arrangements in future, so as to increase the interest and usefulness of the paper.

Pleasing Letters.

We have not made a practice of publishing the numerous complimentary and encouraging letters received by us during the few months past, although they have been highly gratifying to our own feelings. But when, like the following, their tendency is to edify and encourage our friends and correspondents as well as ourselves, justice to our readers demands their publication.

The first letter is from a worthy Minister of the Church of Scotland in Canada, and was written shortly after the commencement of the present year. It was not intended for publication, but we are confident the writer will pardon the liberty we have taken.

MESSRS. EDITORS.—Your determination to persevere gives me much pleasure. You will please continue sending me the New Genesee Farmer, for I cannot afford to lose the instructive enjoyment of my arm-chair intercourse with your various correspondents. When one has become acquainted with their ways and words, and expects periodically to have the pleasure of their conversation, the stoppage of your publication would be like the receiving of an hundred funeral cards at once! Who could easily resign himself to the loss of the enjoyment of their dry humour and practical sense? Besides the palpable advantages of their invaluable information, one has the entertainment of holding converse with almost every variety of

human genius. This, to me, is one of the principal charms of your publication, although I am aware it is not the most important advantage. The principles of agriculture are to be inferred only from facts, and the facility which you offer for the statement of these facts to every worthy and public spirited, young or old individual around you, is the gathering in of sheaves for a great harvest of science. That is the rare and great merit of the New Genesee Farmer.

I cannot exactly say that it belongs to the office of a Minister of religion to publicly recommend and pray for the success of the New Genesee Farmer, though things more absurd have in that way been done, but there can be no objections to his doing so in private. One of my deepest convictions is, that a good farmer, of all orders of men, is most likely to be a good christian. He must be a steady man: he must love to work for the world's sake as well as the wages, and above all he must be a lover of all sorts of cattle. Now no one that loves the different races of cattle can have the nature to hate the race of man, and he that loves man—just go on and see where you will end.

Excuse this, Messrs. Editors, and convey, if you have any means of doing so, my earnest request to my friends of the by-gone year, that they will continue to correspond with me—I ought to have said with you, gentlemen, but beg pardon, and remain,

Yours, &c. L. T. W.

A Compliment from Ohio.

We have seldom received a more gratifying letter than the following from a worthy and influential gentleman in Ohio. The approbation of such men is no small reward; and it encourages us to persevere in our attempts to merit such praise.

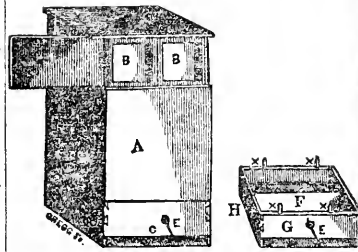
MESSRS. EDITORS.—I have been making an effort to increase the circulation of your paper among the members of our Agricultural Society, and as the result, I herewith send you the names of sixteen subscribers. The superior value of the New Genesee Farmer to us, above all other papers of the kind, I consider to consist in its freedom, thus far, from speculative theories—its refusing to publish the grumblings of discontented and prejudiced men, calculated to discourage farmers from adopting the most approved system of tilling the soil—and its plain practical common sense and safe directions to the farmer.

I am enthusiastically fond of the cultivation of the soil, and if I had time, I would give you the results of my experience in raising and feeding roots, &c.—perhaps I may do so hereafter. I have often risen from the perusal of your paper with this thought, *Now that one number is worth more than the price of the whole volume.* I hope you will 'go on and prosper.' Don't humbug the farmers and discourage them about anything, if you can help it. They are too easily discouraged at the best; and the failure of a new production, or of an agricultural implement to answer its recommendations, will throw (some of) them back years in their improvement. When a good cause gets well established, a single failure don't injure it much; but improved agriculture is not thus established among the mass, and a puff of a poor thing, or the discouragement of a good one, will alike do mischief. I know it is difficult for you to avoid all these evils, but you have hitherto been very successful, and I trust you will still continue to be careful. Wishing you great success, I remain yours truly,

Lorain co. Ohio, May, 1841.

We sincerely thank the writer of the above, and hope he will excuse the liberty we have taken. We should be happy to hear from him often.

* * * We should be pleased to add the signatures to the preceding letters, had we permission to publish them.—*Eds.*

**The Self-Protecting Bee-Hive.**

Mr. Julius Smith has left several of these hives at the Rochester Seed Store, and is desirous of introducing them into use in Western New York. We believe them to be of an improved construction, and a his request publish the description given in the Cultivator, by the inventor and patentee, Wm. M. HALL of New Haven Conn.

"The hive at your office, is of the exact form, and of the most suitable size and workmanship for use; and it contains all the principles of my patent. By the construction of this hive, three very important principles are brought into operation. 1st. The communication from drawer to drawer, thereby enabling the bees to pass freely from one drawer to the other, making as it were, but one drawer, when in fact there are two, thereby producing the most happy effect and causing the bees uniformly to build in both drawers at the same time, when without the communication, they usually fill one drawer, before they commence in the other. These drawers are removed by means of two right angled metallic slides. 2d. A perpendicular hive is obtained which should always be the case; without which the economy of the bees is much disturbed. It is well understood among apiarists, that bees always build their combs in perpendicular sheets, without regard to form or size of the apartment, consequently if the bottom of the hive is crooked, some of the filth must lodge in depending thereby causing much derangement in their operations; but if the hive be perpendicular, all filth disengaged by the bees, immediately falls to the bottom when it is at once discharged by means of the incline plane. 3d. The base or protector. The base is the best possible discharger of worms and other filth. The planes may be constructed to any degree of inclination desired, without injury to the hive or bee; they furnish an opportunity for the bees to alight or enter both at front and rear sides of the hive, at the same time enabling them to crawl to any part of it live without again flying. Bees on returning to hive, at a cool season of the year, partially benumbed if obliged to fly after once alighting as from a suspended platform, frequently die for want of strength rise, and then too at a season when their numbers are more wanted to produce animal heat sufficient for the wants of the brood. It is not unrequently the case that whole colonies when thus treated, perish the month of April. The hive is ventilated by closing the planes more or less as circumstances seem require.

I describe the construction of the Self-Protecting Bee-hive, as follows. Observing that my improved hive consists of three parts, viz. 1st. A perpendicular hive thirteen inches square more or less, as seen in the accompanying drawings, figs. 15, A. 2d. The chamber with communicating drawers at the top of the hive for extracting the surplus honey, without destroying the bees, as seen in fig. 15, B. B. 3d. The base or protector. The base is a square frame of the sides of the body of the hive, about 4 inches deep, without top or bottom, on which the live rests, as seen in fig. 15, C, being connected and held in place by dowels, as seen at X, X, and hooks as seen in the figures. The front and rear sides of the base are narrower than the other sides by about an inch, leaving room at the bottom, for the play of the inclined planes, which form a bottom for the hive; consisting of two inclined planes slanting from the top of the base to the bottom. The inclined planes consist of boards hung within the base of the base, on pivots passing through the sides near the top edge of the center of the sides, and extending below the lower edge of the base in front and rear with a play of about an inch, as seen at F, which represents the plane inclining to the front. G. The front of the base. H. The pivots on which the inclined

anes hang D. The projection of the inclined planes at the bottom of the base. E. The hook to close it tight against the bottom of the base when required.

"The base or protector should be separated from the hive during the process of hiving, when the bees have entered the hive, it may again be added, and the slanes hooked up, when it may be carried to any situation desired, without injuring the bees. The base may also be added to any hive of suitable size and form already containing bees."

Julius Smith of North Brantford, Conn., has purchased of Mr. Hall, the right to make, use, and vend to others the right to make and use the above hives in the counties of Chautauque, Cattaraugus, Erie, Niagara, Orleans, Genesee, Allegany, Livingston, Monroe, Wayne, Ontario, Yates, Steuben, Seneca, St. Lawrence, Franklin, Hamilton, Montgomery, Fulton, Clinton, Essex, Warren, Washington and Schoharie, State of New York. He therefore offers to sell rights for counties, towns, or single hives, on reasonable terms. The hives can be examined at the Rochester Seed Store, and Messrs. Bateham & Crosmen are duly authorized to sell hives and rights. Price of a hive \$5.

The public are invited to call and examine the above hives and read the certificates of those who have used them.

B. & C.

Oneida County Awake.

MISSRS. EDITORS.—An Agricultural Society for the county of Oneida, was organized at Rome, on the 21st of April. An address, full of interest, was delivered by H. S. Randall, Esq., Corresponding Secretary of the State Society.

The following officers were chosen:

Hon. POMEROY JONES, President.

Thomas Goodsell, Harvey Bradley, Riley Shepherd, Lester Barker, Ernest Jeffers, Salmon Case, John Barker, A. Carmichael, V. Tuthill, Ingham Townsend, Vice Presidents.

Benj. P. Johnson, Corresponding Secretary.

S. Moulton, 3d, Recording Secretary.

J. Hathaway, Treasurer.

Eion Comstock, J. G. Green, W. B. Wright, G. Walsworth, Geo. Bristol, Managers.

At a subsequent meeting of the officers it was

Resolved, To raise the sum of \$100, and to hold a fair on the third Wednesday of October.

From the interest manifested, it is believed a new impulse will be given in Oneida, to Agriculture, and I trust the time is at hand, when our county, rich in her natural resources, will be rendered still richer, in their successful development. Yours,

Rome, May 21, 1841.

B. P. JOHNSON.

Important from England.—CORN LAWS.

Late English papers bring the welcome intelligence that Parliament has commenced a discussion on the subject of the odious corn laws, which it is confidently expected will end in their repeal or modification. The highest excitement is said to prevail on the subject among all classes, and petitions, with millions of signatures have been presented to the government, praying for the repeal of this oppressive system of taxation. Lord John Russell has announced that it is contemplated to establish a fixed moderate duty on bread stuffs, in lieu of the present fluctuating and exorbitant rates. The subject was introduced into Parliament by a motion adopted by a unanimous vote of the Cabinet Council; whereas only two years ago the head of that Cabinet, Lord Melbourne, declared the corn laws could be approached, touched, or altered, only by a madman!

The London Times contains the following remarks which may doubtless be regarded as the language of millions:

"THE CORN LAWS.—It is no slight addition to the claims of a cause, which has already so much justice and reason on its side, that they are backed by the most appalling statements of the present destitution and progressive decline of our manufacturing population. The sufferings of millions demand relief, even though that relief were not identical with the truest policy of England. But the welfare of the mass is identical with the interests of the country; and it is because the general privation and the general loss have not fully measured against the particular advantage of a protected interest, that the energies of the country are weighed down by an unequal and injudicious system of taxation. We argued the other day, in favor of a reduction of the sugar duties on behalf of the West India planters; and we now confidently await that measure, with some others of equal importance, from the Government. But with how much more weight should we have spoken if we had dwelt on the sufferings of a people affected by the curse of scarcity; and if we had asked our rulers not only to benefit the planter, and to increase the revenue, but to feed the people by diminishing the duties on colonial produce—by adjusting the taxes on corn upon a system better calculated to avoid the evils of excessive fluctuation in price and entire prohibition, and by sweeping away the duties which exclude us from foreign markets without adding to our own revenue."

The London Chronicle (radical) of the 2d May says—

The sensation produced by the Government notice of Friday night on the Corn Laws is rapidly extending through the country. Every where it is the signal of excitement and determination. By the monopolists it will never be forgotten; and by the people it will never be forgotten. Ministers have fairly thrown themselves on the nation for support in the assertion of a great national right and interest. The response will soon be heard in thunder. The untaxing of the people's bread is a prospect full in view; and the people will spring towards it like lions on their prey.

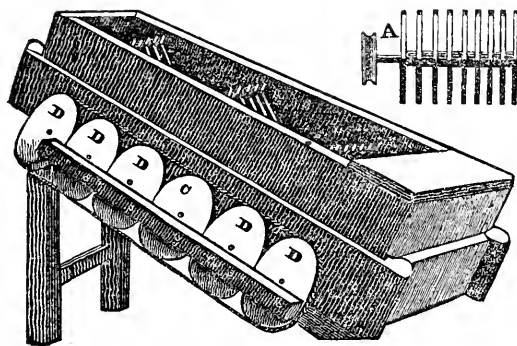
Soaking Onion Seed.

MESSRS. EDITORS.—I have tried the experiment of sprouting Onion seed as per directions of a correspondent of the Genesee Farmer. After covering the seed with warm water several times in the course of three weeks, I despaired of their sprouting, and planted them by themselves—planting the adjoining bed with dry seed. The result is, that the soaked seed came up in four or five days, during the cool weather of the early part of this month—they are now ahead of the weeds. The dry seed just begins to appear, after two weeks planting. SENECA.

Striped Bugs—Inquiry.

MESSRS. EDITORS.—Is there any certain preventive of the yellow striped bugs that destroy our vines? I have never seen any thing yet that would keep them off, that did not destroy the vine. If there is any thing that may be depended upon, please make it known.

REMARKS.—The only sure and effectual way that we know of is to cover the vines with millnet frames. Perhaps some of our correspondents can inform us of a better.—EDS.



BEEBE'S STRAW CARRIER.

The above engraving represents a machine for removing the straw from the cylinder of a threshing machine—invented and patented by Uriah Beebe, of Riga (formerly of Clarendon.) It consists of six (or more) revolving rakes (B) set in a frame in such a manner that when in motion the teeth pass between each other, and take the straw from each other to the end of the frame; while the grain is shaken out and carried through a screen to a blower below, where it is separated from the chaff.

One end of the shaft of each rake (A) passes through the side of the frame, and has a whir attached (D.) The third, or middle whir, (C) is made of double thickness, so as to receive a band from the threshing machine. Another band is passed round all the whirs, and a strip of board is fastened to each, with a single screw, so as to give uniform motion. Thin boards are placed above the sides of the frame, to prevent the straw from watering, and a floor or apron, of boards, is placed below to catch the short straws, where they are taken up again by the rakers till carried off.

The inventor has been several years experimenting with and perfecting this machine; and he now feels confident that it will be found well worth the attention of farmers. It can be seen at any time at his residence in the town of Riga, half way between Churchville and Caledonia. Single machines, with a blower, will be sold for \$33. County or State rights on reasonable terms. Address, URIAH BEEBE,

Riga, Monroe co. N. Y.

Testimonial.

We the undersigned, residing in the towns of Wheatland and Riga, having seen Uriah Beebe's Patent Straw Carrier in operation, believe it to be the best machine for the purpose now in use; for the following reasons: It performs the work in the best manner and with the least power. It performs the labor of at least four hands in the ordinary way; and the power required to propel it is only about the same as for the common fanning mill. It separates the straw from the wheat, and with a blower attached, the chaff also. Possessing, as it does, these superior qualities, we cheerfully recommend it to the public.

JESSE GOODWIN,
J. F. GOODWIN,
W. O. GOODWIN,
D. W. McPIERSON,
DUNCAN TAYLOR,
J. J. ANDERSON,
B. F. SHEPARD

D. TAYLOR,
ERASTUS E. DOTY,
W. KNOWLES,
S. MARSH,
ROBERT SMITH,
J. McPIERSON, Jr., &c. Roy.

ANSWERS TO INQUIRIES.

Our *crataegus*, sold at Augusta (H.) is respectfully informed that we have no room in our columns for the article on flowers that he wishes to be republished; but if he will examine our *first volume*, he will find the proposed alternative in some measure anticipated.

Many varieties of the pear, apple, &c. are much finer in some parts of our wide spreading country than in other parts. For instance: the most popular pear in this district is the Vagabond. The fruit is delicious; and the tree is hardy, thrifty, and productive; but it is thrown out as worthless in some parts of Massachusetts. Every nurseryman ought to ascertain what fruits are best adapted to his peculiar climate and situation; and if he does this extensively, taking his seasons only from bearing trees in his own district, every thing that our correspondent wishes on this point, would be accomplished.

It would be a great labor to give a list of our apples. For winter fruit, the Swan and Spitzenburgh are among the best; but to have them fine, it is necessary that the trees be well pruned. As the branches become crowded, the fruit lessens in size and in flavor. The Roxbury Russet is chiefly valued for its long keeping; but some new kinds, much finer in quality, are said to keep equally well; and of these, some account may be given hereafter in our columns.

THORN HEDGES.

Messrs. Editors—I wish through the columns of your paper to inquire the best method for making live fence (hedge.) Last spring I took up what small thorn bushes I could find, and set them out about six inches apart. Nearly all grew, and I should think they would make a good fence if they could be obtained in sufficient quantities. In the fall of 1839, I gathered a quantity of thorn apples, mixed them with earth, and let them freeze. In the spring, I planted them, but none have come up. I wish to know in what way they may be made to grow? and if common thorn is as good as the English? and where English seed can be obtained? In short, I wish to find out the best way to commence and raise a live fence?

L. H. BRANCH.

York, Ohio, March, 1841.

Remarks.—In Cayuga county we have seen the English thorn (*Crataegus oxyantha*) in two places, six or eight miles apart, and in both it was suffering from *fire-blight*. In Ontario county also, a correspondent of the (Old) Genesee Farmer says, "where the English thorn was tried, that part of the hedge which was clipped [as all hedges ought to be] was mostly destroyed by a small snow white insect, with which it was in many places literally covered." On the contrary in Niagara county, we have seen hedges of the English thorn that appeared to be healthy; but we should be unwilling to employ much labor or expense on this *crataegus*. Many years ago, in the town of East Hampton on Long Island, nearly two hundred miles of this kind of hedge had been planted; but it all died. Writers in that vicinity, ascribed their loss to a fly that deposited its eggs through the bark, and to a worm that preyed upon the twigs.

In the southeastern parts of Pennsylvania, we have seen many miles of hedges made of the Washington or Potomac thorn (*Crataegus cordata*.) The seeds appear to grow as freely as those of the pear or apple. A box containing a parcel of them for us, had been detained over winter on the canal; and when it arrived in the spring, dozens of the roots had penetrated the cloth that contained them, sticking through it on every side like the spines of a hedge hog.

This thorn however, though so easily propagated, is subject to a malady that greatly impairs its beauty, and hereafter may prove ruinous. In particular

neighborhoods the leaves become spotted with yellow. We have not understood that any of the hedges have yet perished from this cause; but we had a crab tree (*Pyrus coronaria*) which died last season, after suffering several years with spotted leaves of the same kind.

While hedges of the Washington thorn were discolored in this manner, we have seen hedges of the New Castle thorn (*Crataegus crus-galli*) on the same farm and closely adjoining, in perfect health and greenness. No dangerous insect is known to attack it; and farmers who have planted miles of thorn hedge, decidedly prefer it to all other sorts.

The seeds however, are much more difficult to germinate. We have seen them treated in the following manner; and we have understood with uniform success. A small trench was cut on the north side of a building, directly under the eaves. Into this, the haws mixed with sand, were deposited in autumn; and as they received in this shaded place, the droppings of every shower, they were kept always moist through two winters and one summer. After sowing in this manner for eighteen months, they were removed to the seed bed.

Many other shrubs have been recommended for hedges, such as the Red Cedar, Orange Orange, &c. With E. Hersey Derby of Massachusetts, both the English thorn and the Honey Locust were entire failures; but with the Sea Buck thorn (*Rhamnus cathartica*) he was completely successful. A part of the Buck thorn however, like the Honey Locust and *Crataegus punctata*, have no thorns on them. We raised hundreds, and never saw a thorn on one of the kind; but we have lately procured seed which may do better.

High Prices induced by High Tariff on Imports, cannot make the country rich, or pay its foreign debt.—Protection necessary to Silk Culture.

Messrs. Editors.—A correspondent of the New Genesee Farmer takes exceptions to my text, "that low prices are more favorable to a nation's wealth than high prices."

His who takes this text in connection with the illustrations of the context, will find that, like a "plant of bitter growth, it bears on its head a sweet fruit."

It has always been the case in England, that when the prices of agricultural productions are low, capital is cheap, her manufacturing industry receives a new impetus; competition reduces prices of manufacture at home; by inducing greater economy and renewed improvements and division of labor in every department of industry: her export trade is increased to an unparalleled extent, and she becomes now, more than ever, the creditor nation of the world. On the other hand, when agricultural productions are high in England, the most feverish state of things exists: the banks curtail their issues, that they may not be ruined by a demand for coin to send to the continent to buy corn; manufacturing industry is paralyzed or embarrassed, and the screws are immediately put upon the debtors of England in the United States.

What but the high prices of 1835 and '6, has caused the general bankruptcy of our cotton growing States? It is certainly not the low prices since 1836, for they are no lower than they were on the average for eight years previous to 1835. The rise in cotton in 1834, from 10½ to 13 cts., and then in 1835, to 16½ cts., turned every head; the United States Bank endorsed the mania, and furnished the facilities to accelerate the common ruin.

The high prices of cotton, our great agricultural staple, in 1835 and '6, was the great stimulating cause of all the bank inflations, and consequent speculation and high prices throughout the whole Union at

that time. New England got great prices for her manufactures at the South and South West. New York felt herself rich when she saw upon her ledger such vast amounts due from the South. England, 1837, wanted our flour at \$8 per barrel in New York but our commission houses said, if we hold on, New England will give us \$10.—Instead of exporting, we imported grain from Europe. The same with manufactured articles. In 1836 we imported \$60,000,000 while we exported next to nothing, owing to the high prices at home.

We now have the sad spectacle of a country growing poor in the midst of high prices. How has it been with the year of low prices, 1840? An unusual export trade—our exports exceeding our imports \$27,000,000—an export of manufactured articles treble the amount of any former year.

Our export of flour, and pork, and Indian corn, has also been unusually large the past year: it has done much towards paying our foreign debt. But had the price of flour been only one dollar per barrel higher it must have been consumed at home, as bread sent from the ports of the Baltic and the Black Sea, would have supplied the hungry parts of the earth at low prices.

Your correspondent says that by a protective tariff we may soon extend our manufacturing interests, as to create a home market for the "great part of cotton grown in our country." I would then ask him how we are to pay our great foreign debt of \$26,000,000?—and besides, the most radical high tariff advocate does not claim any further protection for cotton manufactures from foreign competition, than they now have. Our Western farmers seem to understand the great importance of cotton to the Union, and not only pays the foreign debts of the South, but the North and West also. Cotton alone makes up in value four-fifths of our agricultural exports. I would then ask what would be the state of the nation without it? great staple, as an article of export, and an element of our foreign trade?

Your correspondent says, that in protecting a manufacturing industry, "aid is not so much needed from our State Legislature as from Congress." In relation to the culture and manufacture of silk, would invoke aid from both. The State should grant a bounty, and Congress should pay an impost on foreign article, as high as the spirit of the Compromise Act will permit. Silk is by far the greatest in the account of our foreign importations. It has been computed that the amount of foreign silks consumed in the State of New York alone, for the last years, will exceed \$50,000,000—an amount greater than the cost of all our canals and other public improvements.

But too much protection, like high prices, only bring about those evils they are intended to cure. Mr. Clay was once a radical on the subject of a protective tariff but he is a man of too much genius not to profit the lessons of experience. He also found that a tariff for revenue and protection was often inconsistent with itself; hence his Compromise Bill is intended to be paid for revenue only. We hope it now may be so revised and amended as to serve the ends of protection such of our manufacturing branches of industry most need it without infringing its character as a tariff for revenue only.

S. W.

Watloo, May 10, 1841.

Important Discovery.—A Jamaica paper says, that an ingenious physician and naturalist in this island has discovered the practicability of using mosquito as a substitute for the leech, fifty of the large speckled kind being found equivalent to one leech; of the same kind breed, from sixty-five to seventy being required. The greater irritation produced by the new application has also been found advantageous.

Native Fruits.

The last number of the Magazine of Horticulture contains Professor Russell's Address before the Mallesox Horticultural Society, from which we make the following extract:

"The venerable relic of the far famed Chelmsford ear is yet extant on one of the oldest farms in that town. It is a natural fruit, of excellent market qualities, and known as the Chelmsford, Tingsboro' and Magul Summer. A mere thin shell of the once extraordinary trunk, yet bearing a few scanty luscious and from its roots are four strong suckers, all of which are identical in fruit with the trunk. Below the great gale of September 1846 (?) it was a very large tree; but being injured by that tornado, it rapidly declined to its present condition. The stem however, bears an occasional crop, but was entirely barren the last season. Mr. Manning, the great pomologist, of Salem, remarks that it is a pear of the largest size, and extremely productive. For many years he searched in vain for its origin, sparing no expense in importing pears from the French nurseries to identify it. Inquiry on my part enabled me to confer a trifling favor on my friend, and to establish the claims of old Chelmsford to a fine native fruit.

"The history of the valuable Baldwin apple is familiar to you, bearing in its cognomen a family name yet existent in our midst. A fine early apple has often been exhibited on your tables, originating also in Chelmsford, and known as the Spalding. The addition of these three natural fruits in our vicinity, to pomology, is sufficient to encourage a research into natural varieties, which are as yet but little known. It should be our endeavor to find these out, and no pains should be spared in the attempt. * * * Our own country is the region and natural location of the finest fruits."

For the New Genesee Farmer.

The Importance and Utility of the Dissemination of Knowledge among Farmers.

MESSRS. EDITORS.—The influence of a publication like yours, devoted to agricultural interests, should be directed towards the improvement of the minds of farmers as well as the introduction of improvements in the science of farming. Your columns have already furnished evidence that you are aware of this; and therefore my object is not to urge upon you any new duty, but to suggest a few reflections on the importance and influence of the dissemination of intellectual knowledge among farmers.

It would be a useless waste of words to enter into any argument to show that among this class of our fellow citizens there is no want of intellectual capacity. And if among those who are engaged in other pursuits, there are any who arrogate to themselves a superior order of talents, they betray an ignorance unworthy of a man of common sense. The occupation of a farmer, it is true, will not furnish an opportunity for a senseless display of fashion; nor will his robust form and hardy countenance, give him the exquisite appearance of the straight loined and pale faced dandy. Yet, unadorned by the trappings of art, he is still one of nature's noblemen; and his intellect, *well cultivated*, will display an enlarged and useful capacity, not alone fitted to the occupation in which he is engaged, but to any station to which he may be called through the operations of liberal institutions. And whenever the cultivated capacity of a farmer has been called forth to display itself, either as a legislator, or in the performance of any other public duty, it has by no means suffered from a comparison with those of much higher pretensions. It is not to be denied that there has been a lamentable apathy manifested by the great body of agriculturists in this country, for the acquirement of intellectual knowledge, which is the only thing that can develop the resources of the mind; and perhaps among no other class has there been such apparent neglect of books, or no little disposition to encourage the useful publications of the day. But while we admit that they have neglected their own interests in this respect, it will not follow that they

have not the mental ability. It has heretofore been a too common error among farmers to suppose that it would be great sacrifice of time which ought to be devoted to their business, to appropriate any portion to reading. And even now it is not uncommon, to hear "want of time" urged as an excuse for neglecting to nourish the immortal mind from that fountain of knowledge, which is accessible to those of restricted means as well as to those of greater competency. This mistaken notion however, is daily becoming less prevalent; and I believe there need be no hesitation in saying, that the circulation of agricultural papers has done more than any thing else to accomplish a reformation so desirable. Besides these however, there are numerous other valuable means afforded for improving the mind. The amount of knowledge which may be gathered from these various sources would, when compared with the amount of dollars and cents which it costs to obtain it, be like a comparison of the magnitude of the most lofty mountain to that of a mole hill. If any one thinks his means are too restricted to afford the expense of a weekly newspaper, or the still less amount charged for agricultural papers, let him reflect for a moment, and he will discover that the means for such purposes are at the control of every one. It only costs the labor of a day, at farthest a week, to lay up a store for the mind upon which it may feast; for a year. Neither the lack of means nor the want of time, can be considered a valid excuse to such as properly consider the subject. What farmer is there that can say he has not the time to give one paper at least, a thorough perusal, and only appropriate to it one-fourth of his leisure?

Happily for us in this country, labor affords the means of obtaining whatever may be necessary for the comfort of the body, and at the same time may also provide for the necessary endowments of the mind. And if incentives be wanted beyond the comfort and happiness which an individual will secure to himself, our institutions have not failed to make the most ample provisions.

Perhaps, Messrs. Editors, I have extended these remarks too far, inasmuch as they are only intended as an introduction to what I propose to submit to you on this subject hereafter, when time and opportunity permit, provided my remarks shall be deemed worthy an insertion in your valuable paper.

Yours, &c., C. P. T.

Batavia, May, 1841.

Treatment of Hired Men.

Entreat not evil the hiring that bestoweth himself wholly for thee.—ECCLESIASTICS.

Art thou a man employing others to till thy grounds? Then remember that thou hast a Master who commands thee not to over-task or to abuse them. They are free men—the rights of free men are theirs. Of thee they are your equals in intelligence, character and respectability. Both duty and interest require you to recognize their rights. They may demand, at reasonable times, as much profitable and wholesome food as is needed to preserve unimpaired their health and strength. They may demand as many hours for rest and sleep as the human constitution ordinarily requires. They may demand comfortable beds, in rooms not unhealthily. They may refuse such excessive efforts or great exposures as would prematurely break down the constitution. They may claim kindness and civility in all your language towards them, and in all your treatment of them. It is no part of their contract that they should listen to onths and curses, should such things pass your lips. It is no part of the contract that they shall bear such mental suffering, as unreasonable reproaches, unprovoked fault-finders, or ungenerous passions on your part, may produce. Unjustly forfeit it by misconduct, they may claim your confidence that they will be faithful to you and to your interests. When found unfaithful, let the fault be stated, and a full mutual understanding be obtained. But if bad, very bad for both employer and employed to be suspicious of each other. Mutual confidence is for the comfort and good of both.—"Every body knows eve-

ry thing;" and if you undertake to thrive by keeping laborers on a short allowance, by working them in an excessive number of hours, by dint of coldness and fretfulness, by any secret means, they will read your heart's secret purposes, and will find ways and means to thwart you in the accomplishment of your designs. Impudence and injustice on the part of employers, create in part the mistrustworthiness complained of in the employed.

We may preach next to the employed—the hired.—N. E. Furness.

From the (Nashville, Tenn.) Agriculturalist.

Is the Tariff a Political Question?

There is not a more ignorant and vulgar notion in society, than that which declares parties to claim protection in the sales of our own products. Can any one tell what party it was that lay so heavy a duty upon foreign cotton goods, twenty five years ago, as to enable Americans to make better fabrics at one-fourth the value of those imported? Can any one tell what party it was that taxed foreign boots, iron, sugar, salt, &c. &c.? Oh, says the pseudo politician, all parties contributed to these matters, for that was right. Very good; but if both the north and the south enjoy the benefits of, and strenuously advocate measures to promote their respective interests, does it not show that protection is the wish of every American citizen? The question of party originates then, not from the thing itself, but from the manner of administering it. The north will never consent to a tariff which seems to favor the south, and the south will not agree to a system that will favor manufacturers more than planters. But as every man is for promoting a system of protection that will favor his own interests, should it not be the study of all to tax such articles as would be the interest of every section of the country to do so? It does not seem that partisans have become so sensitive and fearful of shadows, that fear itself they will do wrong, they do nothing. Suppose the English make cotton to supply her own factories, and then bring a little for sale at a low rate to our own factories. The Southern will come forward and advocate a cotton tariff, but not under the *Letitians*, he should have no favors. However, we think it would be right, even in this event, and it is a very probable one, to protect our own citizens. The old maxim, that "charity begins at home," is pretty nearly always correct. At present it is doubtless the interest of every citizen of the United States to buy less foreign silk, and raise more at home. The best means of affecting these ends, in our judgment, is to lay a heavy tax on foreign silks, and give premiums to our citizens to produce both the raw material and manufactured articles. Some one may ask, we can produce silks equal to others, and we cheer why do we need protection? There are but few, as yet, acquainted with the business, and a certainty of getting something, if it is a small price, will be sure to induce many to embark in the business. Another reason is, before we become well acquainted with the feeding of worms, and manufacture wearables, for want of knowledge, we may expect to meet with unforeseen difficulties and sustain severe losses; and here our country's encouragement would ease the disappointed and dispirited to try it again, and continue effort after effort, till abundant success could be seen.

There is a certain training, or time of pupillage, essential to the success of any thing that is new, and the most watchful may expect to meet difficulties. There is but little doubt silk can be produced in this country, twenty years hence, at less than one half what it can be now. We well recollect our boyish days, having to set up, on a "nodding stool," at the late hour of night, "picking cotton"—a consisted in pulling the fibres from the seed with the fingers, and so cher, got enough in a week of nights to make himself a shirt, he did very well; but see now what improvement has done! Instead of half pounds, we count bales. And a better article can now be produced at less than a fourth what it could twenty-five years ago. Silks are not anticipated similar results for silk? Losses are anticipated at first, but improvements in the machinery, &c. will produce wonderful changes. Let statesmen then become sensible, and the people also gain enough of patriotic sense, to make their servants smile upon their labors. When the people come to understand their own interest, they will not address their members of Congress, or State Legislatures, as humble petitioners, but as sovereign lords of the land, whose commands must be obeyed, at the hazard of being reconded. When the great mass get ripe for action, legislation will be favorable, not before. Let none be ashamed or afraid to talk of this matter, and send it to both young and old, and the intelligence of the people will soon establish the silk culture.

N. Y. State Bounty on Silk.

The bill to encourage the growth and manufacture of silk, was passed by the Legislature a short time before its adjournment. We believe it was slightly amended, though not materially, but as it will be some time before it will be published by the State paper, and knowing the anxiety of many of our readers on the subject, we give it them this month as reported by the Assembly, and if any alterations were made by the Senate, we will mention them next month.

We first thought to omit all the preliminary remarks of the committee, but on examination we found them to contain so much important information and correct reasoning, that we felt unwilling to withhold them from our readers.

REPORT

Of the select committee on the bill entitled "An act to encourage the growth and manufacture of silk."

[Committed to the Committee of the Whole.]

Mr. Ward, from the select committee to whom was referred the bill "to encourage the growth and manufacture of silk,"

REPORTS:

That your committee have had the subject under consideration, have collected many interesting facts in relation thereto, and submit the same for the consideration of the House.

Your committee are surprised to find how great a field is here open and how long it has been neglected. They are satisfied beyond a doubt, that we have the power to produce and manufacture silk in this State on an immense extent, and that no difficulty is to be encountered either from soil or climate.

In their investigations upon this subject, the committee hardly know whether they have been most surprised at the beneficial results which have eventually accrued to those nations or governments where the growth and manufacture of silk have been encouraged and brought to a state of comparative maturity, or at the intention and openly hitherto manifested in regard to it a great interest in this country, by a people so pre-occupied for their spirit of enterprise, and unequalled in their ability and resources, whether mental or physical, for the adoption and the successful prosecution of any and every branch either of science or the arts, by which their wants may be supplied, their desires satisfied, and their independence of foreign labor and foreign ingenuity be fully achieved.

Your committee can attribute this reluctance or neglect on the part of the American people to embrace a subject of so much importance to themselves as the culture and manufacture of silk—an article which for years has ceased to be considered a luxury, and become one of daily and almost indispensable necessity—only to an ignorance which prevails of the great and increasing amount which their wants demand, the heavy tribute which they annually pay to foreign industry and foreign skill, and their want of a correct and general knowledge of the adaptation of the soil and climate to the growth, and our ability to manufacture silk, equal, if not superior, to that of any other nation on the globe.

According to the report of the Secretary of the Treasury, the value of silk imported into the United States in 1833, amounted to \$3,438,366; but had increased in 1835 to the enormous sum of \$22,959,212; while all our exports, except tobacco and cotton, amount to only about \$10,000,000 annually.

The nations of Europe and Asia, are generally engaged in the culture and manufacture of silk; and your committee are of opinion that, in order to a full understanding of the subject, a brief history of the rise, progress and final success of the culture of silk in those countries, should be given at the same time.

The first knowledge that we have of the cultivation of the silk worm, and the manufacture of silk, was among the inhabitants of Syria, the northern part of China, from whence it derived its name.

More than 2,000 years before the Christian era, an Empress of China, desirous of rendering silk worms more extensively useful, collected them from the mulberry trees, and introduced them to the Imperial apartments. Thus sheltered and thus protected, they yielded silk superior in quality to that produced in the forests. She also taught in what manner to manufacture silk from the cocoon. This employment, although at first confined to ladies of the highest rank, gradually became general among all ranks in China.

As the manufacture increased, it became an article of exportation to neighboring countries, and finally became the great and inexhaustible source of wealth to China.

From China, it was exported to India, to Persia, to Arabia, and indeed to the whole of Asia. The expedition of Alexander to Persia and India, first introduced the knowledge of silk to the Greeks, 350 years before the Christian era. As in China, so also in Greece, India, of the greatest distinction attended to the rearing of silk worms at their introduction there. For upwards of four centuries, the cultivation of silk was confined to the countries of Greece. Sicily and Naples were ignorant of the art, and its introduction into the rest of Italy was extremely slow.

At Rome, 630 years after the introduction of silk into Italy, a silk attire of purple, was accounted by its emperor, as a luxury too expensive for an emperor; its value being equal to that of gold, by weight. But so extensive is its culture at the present day throughout Italy, that two-thirds of their whole exports to all countries consist of silk.

It is less than 240 years since its first and successful introduction into that country by Henry IV. That government has continued its fostering care, until silk and its manufacture has become the most productive source of the wealth of France.

In all countries the culture of silk has engaged the particular attention of governments, and every encouragement has been given to increase its culture, and with success. Yet in our own country, so highly favored in all respects by nature, the successful introduction of the silk culture, is mainly due to individual enterprise. Until recently, individuals have struggled single handed and alone in the cultivation of this article.

On a careful examination of the subject, your committee are of the opinion that the period is fully arrived, when the policy of the State of New York should be directed towards encouraging, by every consideration, the growth and manufacture of this valuable product within our own territory.

A number of our sister states have thought it advisable to encourage the culture of silk, by legislative bounty for a limited period; and why should the Empire State be behind her sister States, in encouraging and fostering the benevolent enterprises of the day.

A State bounty of fifteen cents per pound on cocoons, and fifty cents per pound for reeled silk, continued for a few years, will induce farmers to engage extensively in the culture, and when once fully established, we have no fears for the result. The State may then venture to leave the silk culture to rise on its own merits.

It is an employment in which all may engage. The rich, with honor and profit to himself and to his family; and the poor man can by his successful cultivation, place himself and family beyond the reach of poverty and want.

Silk can be raised to a much greater profit than wool, because three pounds of silk can be produced from the same land that would produce but one pound of wool, and the raw silk will sell for eighteen dollars, while the wool will sell but for fifty cents. The labor of raising silk is performed in six weeks, and may be performed by children or feeble persons, whose services would be worth but very little for any other purpose, while the labor of taking care of sheep and providing them with food lasts all the year; and a man with but little land, who has a family, can keep them employed at home, without the risk of sending them abroad for employment.

The cultivation of silk is an object more congenial with the domestic habits of the farming population, than almost any other of our household employments. And nothing can be said against the successful cultivation and manufacture of silk, but what was equally properly urged against the raising of cotton on its introduction into this country as an experiment, yet its success has been complete—triumphant.

Cotton was first raised in this country as an experiment in 1788, and although but fifty-three years have elapsed since its first introduction, we now manufacture annually from 45 to \$50,000,000 in value of cotton goods, and export of raw cotton more than \$60,000,000 in value annually. Such is the effect, and such the result, of well directed and properly protected domestic industry. Our success in the growth and manufacture of cotton encourages the belief that similar success will attend the growth and manufacture of silk.

The history of the past may be the history of the future. And we trust the time is not far distant when we shall see our wives and daughters arrayed in silk

of their own manufacture; when, instead of paying foreign nations \$20,000,000 annually for this article we shall export and receive back some of the millions we have paid to others for this article luxury.

Entertaining these views, your committee have examined the bill referred to them, and report the same with amendments.

AN ACT

TO ENCOURAGE THE GROWTH AND MANUFACTURE OF SILK

[As reported amended by the select committee.]

The people of the State of New York, represent in Senate and Assembly, do enact as follows:

SECTION 1. To any person or persons residing this State, who shall present for examination, to a justice of the peace of the city or town wherein such person or persons reside, a pound or more of good d silk cocoons, or a pound or more of good, well reeled silk, and shall, by him, her or them, or attornied or by the oath or affirmation, of some other credible person, prove to the satisfaction of such justice of the peace the cocoons presented, were raised in the city or town where such justice resides, or that the silk was reeled in such city or town, and from cocoons raised in this State. The said justice having examined and caused the same to be weighed, shall give his official certificate specifying the number of pounds of cocoon or silk presented, the time when, and the place where the same was raised or reeled, and the names of the person or persons by whom the same was raised or reeled, together with the name of the person by whom oath or affirmation the facts have been verified. A

On the presentation of any such certificate to a board of supervisors of the same county, they have examined and found the same to be duly given, valid and allow said certificate, and cause their allowance to be endorsed upon the same, requiring the treasurer of said county to pay to the bearer thereof a premium of fifteen cents for every pound of cocoon and fifty cents for every pound of reeled silk specified in said certificate.

§ 2. It shall be the duty of each county treasurer upon such a certificate thus audited and allowed, to be presented, to enter in a book kept by him for the purpose, the date of said certificate, the number of pounds of cocoons or reeled silk named therein, and the names of such person or persons for whose benefit the same were given, and to endorse upon said certificate his acceptance thereof, and the time when presented to him, and return the same to the bearer thereof, to be presented for payment as he may direct.

§ 3. On or before the first day of May, in each year, the several county treasurers of this State to whom shall have been presented for acceptance a such certificate or certificates as are specified in the preceding sections of this act, shall cause to be made an abstract or abstracts of all such certificates so presented and accepted; stating the number of pounds of cocoons or reeled silk, and the amount of premium due therefor, and shall transmit the same to the Comptroller of this State, who shall by his warrant, authorize and direct the Treasurer of the State to pay to the county treasurers the several amounts specified in the abstracts by them transmitted. And the said county treasurer shall thereupon proceed to pay the premium due upon the certificates by them respectively accepted, as the same shall be presented for payment.

§ 4. False swearing or affirming under this act shall be deemed perjury; and any fraud practiced under the same shall be a misdemeanor, and be severally punished as such.

§ 5. A justice of the peace shall be entitled to receive, for every certificate given by him, by virtue of this act, the sum of twenty-five cents, to be paid by the person receiving the certificate.

§ 6. This act shall continue in force until the first day of June in the year eighteen hundred and forty-six, and no longer.

Liebig's Agricultural Chemistry.

We observe that an American edition of this work has just issued from the press, and such of our readers as are interested in agricultural science, will be richly repaid for its perusal.

The high character of the work may be inferred from the fact, that it was prepared by Prof. Liebig at the special request of the British Association for the advancement of Science; and the ability with which the task was performed is evident from the extracts we have seen.

The author has advanced some theories, which are controverted by able chemists of the day; and he appears also to have made some important discoveries. His theory of the operation of gypsum is very interesting, and altogether plausible. After verifying ascertained the existence of ammonia in rainwater, he was led to the following conclusion. "The rhombic of ammonia, contained in rain water, is decomposed by gypsum in precisely the same manner as the manufacture of sal ammoniac. Soluble sulfate of ammonia and carbonate of lime are formed, and this salt of ammonia, possessing no volatility, is subsequently retained in the soil. All the gypsum gradually dissolves, but its action on the carbonate of ammonia [of the rain] continues as long as a trace of exists."

The great mass of the opinions contained in the work, of course are not expected to be original with Prof. Liebig, although he has amplified them, and presented them in an interesting light; and we have been surprised to see the Cultivator and New England Farmer, attribute to him discoveries and opinions known in vegetable chemistry long ago; especially the careful explanation of the equilibrium maintained in the oxygen and carbon of the atmosphere by the combustion and respiration on the one hand, and the growth of plants on the other, in the latter journal.

Ashes—An Important Suggestion.

It has been frequently observed by farmers, that gypsum on some soils, loses its efficacy, after several successive applications. The crop of grasses becomes greatly diminished, and the gypsum possesses no further power to restore it. The following extract from Liebig, contains a most important suggestion, and the experiment is well worthy an accurate trial. The reader will bear in mind that *potash* is an important constituent in most vegetables, especially grasses.

"When we increase the crop of grass in a meadow by means of gypsum, we remove a greater quantity of potash with the hay, than can, under ordinary circumstances, be restored. Hence it happens, that after a space of several years, the crops of grass diminish on the meadows manured with gypsum, owing to the deficiency of potash. But if the meadow be strewn from time to time with wood-ashes, even with the lixivated ones which have been used by soap-boilers, then the grass thrives as luxuriantly as before. The ashes are only the means of restoring the potash."

Log Houses.

MESSRS. EDITORS—A log house in a newly settled country, has always struck me as exceeding good taste, and first rate domestic economy; although I have often heard sensible men and women remark that such a man would be "much better employed in hauling his logs to the saw mill with a view to a frame house, rather than pile them up into such an unsightly dwelling."

But who ever heard of a first rate frame building built in the first settlement of a country? Such houses are necessarily built of green stuff, by rude workmen, with a hasty connected crazy foundation; so that with much greater expense in the beginning, they soon come to be as worthless and more unsightly than a simple log cabin, and equally unfit for profitable repair.

But the man who first builds a log house has more advantages in the premises, than many near to the uninitiated. In the first place, instead of exciting the jealousy or envy of his poor neighbors, they all fall in with hearty good will to his aid, and his house is up, like Jonah's gourd, in a single day. He now saves his substance to build a barn and improve his domain. At his leisure he draws his logs to the mill, to be converted into boards and scantling for a new

house. He barter off his surplus products as he can spare them, for brick, lime, nails, glass, &c. In the end he builds within his own means, a substantial house, which adds to the comfort of his family and the value of his farm.

When I see a rickety frame house standing on a farm badly fenced and worse improved, ten to one but the story is, that the proprietor sealed his ruin by the building of that house, before his acres were cleared and fenced to an extent necessary to enable him to afford it; that he is now in debt, discouraged, and compelled to employ that time in providing for his debts which is so much needed by his farm. S. W.

From the Journal of the American Silk Society Varieties of Silk Worms.

GIDEON B. SMITH, Esq.

Dear Sir—Since your favorable notice of my proposition to simplify the silk business by the adoption of simple names which shall be understood by all, I am induced to follow up the subject, reminding you at the same time, that I proposed that you should make any alterations in my classifications which you thought proper, and to show my readiness to take good advice, I shall henceforth adopt your classification, as follows:

- No. 1. Mamel-Jeanne or Large Nankin P. a-nuts.
- No. 2. Small Mamel or Large White P. a-nuts.
- No. 3. Common P. a-nut or Small White P. a-nuts.

—Small Nankin P. a-nuts.

As the other varieties are all inferior to those, which silk growers will learn sooner or later, and then discontinue the use of, I deem it of no importance by what names they are called.

In the mean time, I recommend all who wish to ascertain the precise value of each kind for themselves, to adopt the same experiments made by James Manney of Beaufort, N. C. in June, 1840—see Journal, vol. iii. folio 10. The important part of this experiment is to learn how many worms will make 1 lb. reeled silk of the different varieties—not how many cocoons will fill a bushel—for, of course, a bushel of the smallest cocoons (the small P. a-nut) will yield more silk than the oval sulphur, and so also in drawing comparison between the large P. a-nut and small P. a-nut; the expense of feeding an equal number of worms, say 100,000, being equal—the question is not how many bushels each will make, or how many pounds each kind will weigh, but how much reeled silk will each 100,000 produce, after having been reared with equal care. Mr. Manney's experiments were—lat. 8 oz. mammoth cocoons, in number 141, yielding 360 grs which is 3045 cocoons, or 10 lbs. 10 oz. for 1 lb. reeled silk; 2d. 8 oz. pure white P. a-nut (whether large or small is not stated) in number 134, yielding 359 grs. which is 2965 cocoons, or 10 lbs. 11 oz. for 1 lb. reeled silk; 3d. 8 oz. mammoth sulphur cocoons, in number 145, yielding 327 grs. which is 3495 cocoons, or 11 lbs. 12 oz. for 1 lb. reeled silk.

Upon this basis it is easy for every silk grower to calculate for himself which is the most profitable kind of worms to feed, and weight of cocoons, to produce 100 lbs. reeled silk.

No. of Worms.	Lbs. Cocoons.	
Mammoth White, 380-500	1,067	for 100 lbs.
White P. a-nut, 285-509	1,062	for 100 lbs.
Mammoth Sulphur, 340-509	1,175	for 100 lbs.

If our friends will institute comparison the coming season, by carefully reeling, say 1,000 select cocoons of each variety of worms which they raise, and communicate the exact weight of silk produced from the same, to you for publication, the question will not then rest upon the opinion of one or two individuals, who may be interested in rearing a particular species of worms, but the facts will be ascertained from the whole silk-growing public, and again diffused through your Journal to those most interested in the subject.

I shall endeavor to experiment on your New Theory the present season—I shall not be able to do it so fully as you desire, but will frankly communicate the result of my experience. Truly, yours,

W. A. WOODWARD.

Rhoda, April 10, 1841.

EDGES of the large P. a-nut varieties, of Mr. Woodward's raising, can be obtained at the Rochester Seed Store, if applied for soon.

The most honorable, the most useful, the most independent of men, is the well informed farmer, who knows his own soil, and enjoys the advantages that competence and intelligence are sure to bestow

To Destroy Rats and Mice.

We copy from the (London) Gardener's Chronicle:

"Monsieur Thenard in 1832, submitted to the Academy of Sciences, a plan for destroying noxious animals in their hiding places. The instrument of destruction is sulphureted hydrogen gas, which is particularly destructive to animal life. Animals when allowed to breathe the pure gas, fall down as if struck with a bullet. Even when considerably diluted with atmospheric air, its effects are deadly. A horse dies in less than a minute in air containing 1250 of this gas. A dog of moderate size is speedily killed in air containing only a thousand part of it, and a small bird expires in a few seconds in air possessing 11500 of sulphureted hydrogen.

"M. Thenard's first trial was in an apartment infested by rats, which showed themselves occasionally during the day, and at night were actively engaged in plundering articles in the room. There were 18 rat-holes; and M. Thenard adapted to each of them, in succession, retorts capable of containing half a pint by introducing the bung, and filling up the interval round the neck with plaster. [The mixture will be mentioned below.] In a few minutes not a rat remained alive in the building.

"His next experiment was in an old abbey, when he was equally successful, and having opened part of the wall, he found numbers of dead rats. He recommends the application of this method to the destruction of moles, foxes, and all animals that cannot be extirpated by the usual means.

"Mix 4 parts of iron filings, or very small nails, or scrapings of iron, with 3 parts of flower of sulphur, and moisten it with 4 parts of boiling water, stirring it with a piece of wood. Add gradually afterwards 4 parts more of water, and introduce it into the retort. Pour upon the mixture, common oil of vitriol diluted with 5 times its quantity of water, and continue to add it gradually until the effervescence ceases."

These directions appear to us incomplete; and we wish to inquire of some practical chemist, how the operator is to avoid the ill effects of the gas, while he is pouring on the oil of vitriol? and while he is closing the rat-holes round the retort?

The following poem, by MARY HOWIT, we insert by the request of a fair friend, who justly deserves it may be new to some of our readers, and cannot fail to excite feelings of gratitude towards that Being who provides so liberally for our pleasures as well as necessities.

The Use of Flowers.

God might have made the earth bring forth
Enough for great and small—
The oak tree and the cedar tree,
Without a flower at all.

He might have made enough, enough,
For every want of ours,—
For luxury, medicine, and toil,
And yet have made no flowers.

The ore, within the mountain mine,
Requiescent none to grow,
Nor does it need the Lotus-flowers
To make the river flow.

The clouds might give abundant rain,
The night-dews might light fall,
And herbs, that keepeth life in man,
Night yet have drunk them all.

Then wherefore were there were they made
All dyed in rainbow light,
All fashioned with supremest grace,
Up springing day and night?

Springing in valleys green and low,
And in the mountains high,
And in the silent wilderness,
Where no man passes by?

Our outward life requires them not,
Then wherefore had they birth?
To minister delight to man,
To beautify the earth?

To comfort man—to whisper hope,
Whenever his face is dim,
For who so earth for the flowers,
Will much more care for him!

The first elements of wealth are obtained, by labor from the earth and water.—Franklin.

For the New Genesee Farmer.

Cheese Making.

Messrs. Editors.—Communications are occasionally made through your paper, giving the best method of making cheese from practical experiments.—As your journal is designed for a medium through which farmers can interchange their views upon the various subjects connected with their high calling, I submit the following, if you think it worthy of occupying a corner of your Farmer.

The plan generally proposed by your correspondents, is to strain the milk in the tub over night, and warm it in the morning, carefully stirring in the cream. Mr. A. F. Bill, in the October number of the New Genesee Farmer, says,—"In the morning take off the cream with a skimmer and put it in a vessel by itself; then warm the milk, or a part of it, over a slow fire till about blood heat; then pour in the cream, and stir it moderately till there are no particles to be seen floating upon the surface."

It seems to me evident, that when the cream is once separated from the milk, it can never be so thoroughly incorporated with it again, as to set the milk as soon as taken from the cow.

Our method is this: Immediately after the cows are milked at night, (and the quicker the operation is performed the better,) we strain it into the cheese tub and put in the rennet—as the milk when it first comes from the cow is in precisely the right temperature to set. If the rennet is good, and properly prepared, a large table spoonful is sufficient for a pailful of milk. The tub should then be covered with a cloth, and allowed to stand undisturbed—in about 40 minutes it will coagulate. It is then carefully cut, the tub again covered and left to stand till morning. When the tub is wanted for the morning's milk, the night's curd is dipped into the cheese basket, or cheese sink, to drain, and the morning's milk strained into the same tub. The rennet is then put on, going through the same process as with the night's milk. When sufficiently drained, the two curds are ready to be put together, scalded and salted according to the discretion of the maker.

Those who have had the least experience in the management of milk, must know that warming it after it has once cooled, gives it a tendency to sour the quicker. Any person who will take the trouble to try the experiment, will find that curd made from milk warm from the cow, will keep *much* longer than that which has been warmed over the fire; and, besides this, it saves the time and trouble of *skimming* and *warming*. Nothing will make a good cheese maker assume a belligerent attitude so quick, as to see the skimmer flourished over the cheese tub.

From a long experience in a modern sized dairy, I am persuaded that in no way can so much, or cheese of so good quality be made, as to set the milk while warm from the cow.

Yours,

E. BISHOP.

Attica, Genesee co. April, 1841.

P. S.—While upon a subject connected with cows, let me suggest to your correspondents who occasionally send you the quantity of milk given by a particular cow, to give it in *pounds*, and not in *quarts*. It can be done much easier, and with greater accuracy; and not only so, but in the latter case it is too often *guessed at*, or, measured, froth and all, in bruised and bottered quart measures.

For the New Genesee Farmer.

Cure for Murrain.

Messrs. Editors.—I have seen several inquiries respecting the murrain in cattle, and being in possession of a recipe which in nine cases out of ten, has proved successful in curing the same, I herewith send

to you, in hopes that if you give it publicity, it may be of some benefit to those who are yearly losing many of their cattle.

Recipe.—Give 1½ oz. pearlash, dissolved in 2 qts. of iron-water, (from blacksmith's trough.) If not better in 5 hours, give ½ oz. more in 1 qt. water. The water should be warm. Give no drink but warm water, for two days. Give warm mash to eat.

The person from whom I got the recipe has cured a great many cattle in this vicinity, at one dollar per head, and asked \$10 for the recipe. I take this mode of making it as public as possible.

Yours truly,

THOMAS FORSYTH.

Chatham, Canada, April 10, 1841.

Leached Ashes as a Manure.

Leached or drawn ashes possess a highly beneficial effect, particularly when applied to lands deficient in calcareous matters, as lime or marl. They serve to improve the permanent texture of such soils. The ashes from the soap boilers of London yield 90 parts in 100 of calcareous matter. They serve to fire light lands of sorrel, and in swampy lands they effectually destroyed rushes and other aquatic weeds. They are extensively used on the light sands upon the Atlantic coast, and are bought up at a shilling a bushel, in the towns and cities upon our navigable waters, and transported thither. There are immense quantities of these ashes in the interior, on the sites of old factories, which may be employed to great advantage in agriculture, whenever the agriculturists of frontier districts find time and disposition to arrest the deterioration of their lands. The small quantity of alkaline salt and gypsum which they contain, also, renders them much superior to common calcareous matter as a top dressing for every kind of grass. Soap boilers' ashes, according to the "Complete Gardener," are also excellent on a peat moss, in strong cold soils, when applied in the quantity of two or three cart loads an acre. In Lancashire, they have been found good and durable on dry pastures, and have also been successfully used in other parts, and in various proportions. They are generally considered better for pasture than rubble, and crops of clover hay have been more than doubled by them. The effect of this manure is, that it *always destroys weeds and remains of every kind*. Evidence of these latter facts may be found in communications to the British Board of Agriculture, vol. vi. part ii.—*Cultivator*.

Make your own Measures.

We give below a rule by which every one can easily make his own measures.

A barrel contains 10,752 cubic inches. A box 21 inches long, by 15 inches wide, and 28 inches deep, will hold just a barrel.

A half barrel. Make a box for this 24 inches by 16, and 14 inches deep. This will contain 5,376 cubic inches, or just half a barrel.

A bushel. This has 2,150 4 cubic inches. A bushel box will be 16 inches by 16 8 10 inches square, and 8 inches deep.

Half bushel. A box 12 inches long by 11 2 10 inches wide, and 8 deep, will hold just half a bushel.

Peck. A box 8 inches by 8 4 10 inches square, and 8 inches deep, is a peck.

Half a peck is 8 inches square and 4 2 10 inches deep, or 26 8 10 cubic inches.

A half gallon. This contains 134 4 10 cubic inches. A box 7 inches by 4 8 10 inches deep, has just that quantity.

Quart. 4 inches by 4 inches 4 2 10 deep.—*Built Farmer*.

Agricultural Banks of the several States.

It seems from a recent statistical statement, that the rank of the several States in agricultural productions, is as follows:

In Wheat—1st, Ohio; 2d, Virginia; 3d, New York. In Indian Corn—1st, Tennessee; 2d, Virginia; 3d, Ohio.

The results in Kentucky are not given. It is possible she might be second or third.

In Potatoes—1st, New York; 2d, Maine; 3d, Pennsylvania.

In Cotton—1st, Mississippi; 2d, Alabama; 3d, Georgia.

In Tobacco—1st, Tennessee; 2d, Maryland; 3d, Virginia.

In Wool—1st, New York; 2d, Ohio; 3d, Vermont. In Swine—1st, Tennessee; 2d, Ohio; 3d, Kentucky, probably.

In Lumber—1st, New York; 2d, Maine.

Louisiana, of course, raises the most Sugar. But there are immense quantities of maple or country sugar, made in New York, Ohio, and other States.

Looking at the above rank of the leading States, in eight of the principal articles of agricultural production, some curious facts may be inferred. First: Of all the States in the Union, that which probably has, and admits of in future, the *most various production* (not the greatest aggregate,) is *Tennessee*. The reason of this will be obvious from an inspection of the map. The State embraces both northern and southern productions, the most fertile land, and the most abundant mineral resources.

Secondly: The State capable of sustaining the *largest productions*, is *Ohio*. This is obvious from her position in reference to Wheat, Corn, Hogs, Wool and many other productions which are essential to the sustenance of human life.

Thirdly: The State which at this time produces the most in aggregate value, is *New York*. This is owing to the combination of capital, experience, and population.

Looking to the means of sustaining a very great population, Ohio stands ahead of every other State and it is this great fact, united with powerful moral causes, which has given it such an extraordinary growth. Fertile, alluvial lands have, over the whole earth, been the seat of the densest populations, at the most flourishing empires.—*Cincinnati Chronicle*

An Act to Promote Agriculture.

[Passed May 5, 1841.]

The People of the State of New York, represent in Senate and Assembly, do enact as follows:

§1. The sum of eight thousand dollars per annum shall be and hereby is appropriated for the term five years, for the promotion of agriculture and household manufactures in this State, in the manner following, to wit:

To the county of Albany, the sum of two hundred and five dollars.

Albany, one hundred and twenty-three dollars.

Brown, sixty-seven dollars.

Cattaraugus, eighty-six dollars.

Cayuga, one hundred and fifty-one dollars.

Chemung, one hundred and forty-three dollars.

Chemung, sixty-two dollars.

Chemung, one hundred and twenty-two dollars.

Columbia, one hundred and thirty-three dollars.

Columbia, seventy-five dollars.

Delaware, one hundred and six dollars.

Dutchess, one hundred and fifty-seven dollars.

Essex, seventy-one dollars.

Franklin, fifty dollars.

Fulton and Hamilton, sixty dollars.

Genesee, one hundred and seventy-nine dollars.

Greene, ninety-one dollars.

Herkimer, one hundred and twelve dollars.

Jackson, one hundred and eighty-three dollars.

King, one hundred and forty-three dollars.

Lewis, fifty-three dollars.

Livingston, one hundred and seventeen dollars.

Madison, one hundred and twenty dollars.

Monroe, one hundred and ninety-four dollars.

Montgomery, one hundred and seven dollars.

New York, nine hundred and fifty dollars, to the American Institute.

Nagara, ninety-three dollars.

Oneida, two hundred and forty-five dollars.

Orangetown, two hundred and four dollars.

Ontario, one hundred and thirty dollars.

Orange, one hundred and fifty-two dollars.

Orleans, seventy-one dollars.

Oswego, one hundred and thirty-one dollars.

Otsego, one hundred and forty-eight dollars.

Pennam, one hundred and eight dollars.

Queens, one hundred and eighty dollars.

Rensselaer, thirty-four dollars.

Rochester, thirty-six dollars.

Saratoga, one hundred and twenty-one dollars.

Schenectady, fifty-one dollars.

Schoharie, ninety-seven dollars.

Seneca, seventy-four dollars.

Steuben, one hundred and thirty-eight dollars.

St. Lawrence, one hundred and seventy dollars.

Suffolk, ninety-seven dollars.

Sullivan, fifty-seven dollars.

Tioga, sixty-one dollars.

Tompkins, one hundred and fourteen dollars.

Ulster, one hundred and thirty-seven dollars.

Warren, forty dollars.

Washington, one hundred and twenty-three dollars.

Wayne, one hundred and twenty-six dollars.

Westchester, one hundred and forty-six dollars.

Yates, sixty-one dollars.

And to the New York State Agricultural Society,

one hundred dollars.

§2. When the New York State Agricultural Society,

and any county agricultural society now formed,

or which may hereafter be formed in this State, or the

American Institute in the city of New York, shall

raise by voluntary subscription any sum of money,

the president and treasurer shall make an affidavit of

the facts of the formation of such society, and of their

raising said certain sum, specifying the amount

thereof, which affidavit shall be filed with the com-

ptroller of this State, who shall draw his warrant on the

treasurer for a sum equal to the amount of such volun-

tary subscription, not however exceeding the amount

of which such county or State society would be enti-

led, according to the apportionment aforesaid.

§3. The New York State Agricultural Society and

several county agricultural societies now formed or

which shall be formed in this State, during the continu-

ance of this act, shall annually elect such and so many

officers as they shall deem proper; and it shall be

the duty of such officers annually, to regulate and

ward premiums on such articles, productions and im-

provements, as they may deem best calculated to pro-

mote the agricultural and household manufacturing in-

terests of this State, having especial reference to the

net profits which accrue, or are likely to accrue, from

the mode of raising the crop or stock, or the fabrica-

tion of the article thus offered, with the intention that

the reward shall be given for the most economical or

the most judicious mode of cultivation; provided always

that before any premium shall be bestowed, the person

claiming the same, or to whom the same may be award-

ed, shall deliver in writing to the president of the so-

ciety, as accurate a description of the process of pre-

paring the soil, including the quantity and quality of

manure applied, and in raising the crop, or feeding the

animal, as may be; and also of the expense and prod-

uct of the crop, or of increase in value of the animal,

with the view of showing accurately the profit of cul-

tivating the crop, or feeding or fattening the animal.

§4. The president of the State Agricultural Society,

and the several presidents of the said county societies,

who shall receive or expend any of the moneys hereby

appropriated, shall annually, in the month of Decem-

ber, transmit to the comptroller, a detailed account of

the expenditure of all the moneys which shall come

into their hands under this act, and stating to whom

and for what purpose paid, with the vouchers therefor;

and the said presidents of the several county agricul-

tural societies shall, annually transmit in the month

of December, to the Executive Committee of the

New York Agricultural Society, all such reports or re-

turns as they are required to demand and receive from

applicants for premiums, together with an abstract of

their proceeding through the year.

§5. The Executive committee of the New York

State Agricultural Society shall examine all reports

and returns made by the presidents of the county agri-

cultural societies, and compile, arrange, and report the

same, together with a statement of their own pro-

ceedings, to the Secretary of State, in the month of

January thereof year.

§6. The presidents of the several county societies,

or delegates to be chosen annually by them for the

purpose, shall be ex-officio members of the New York

State Agricultural Society.

§7. It shall be the duty of the county clerks in the

several counties of the State, to cause notice to be

given in one or more newspapers in each county, of

the time and place of a meeting to be held in such county

for the purpose of organizing such county agricultural

society; and notice thereof shall be given at least

four weeks previous to such meeting.

§8. This act shall take effect immediately.

State of New York, } This act has been approved

Secretary's Office, } and signed by the Governor

on the 5th of May, 1811, and he hereby certifies that

the same became a law on that day.

JOHN C. SPENCE.

Secretary of Sta.

Flowers and Their Odors.

It has occurred to me, that the lovers of sweet flowers, who live on calcareous or limestone lands, may be benefited by a knowledge of the fact, that disintegrated siliceous sand, if not essential to the formation of

the aroma of flowers, certainly promotes it, and renders it more abundant and delicate. Flowers of the richest perfume are the natives of sandy lands—Paeonia, Arabis, and the southern shores of the Mediterranean, in roses, Violets, Lonicera or Honeysuckles, &c., in pots, should be supplied with a considerable portion of sand; and those growing in gardens and pleasure grounds also. In many indigenous plants which are destitute of bark, the stem or culm is strengthened by siliceous taken up by the sponges or elaborated by the organs of the plant from its elements. Analysis detects it in considerable quantities even in the stalks of wheat and Indian corn; and I believe in all the grasses, the flowers of which are aromatic. In line to think, too, that in the rich calcareous lands of the west, away from the sandy alluvial soils of the rivers, grapes will be rendered of better body and will give wine of a superior quality, if sand, (instead of manure, when the land is rich,) be mingled with the soil; and I should for these prefer even gravel to fine sand. I am not aware that the experiment has been made in regard to the grape, but it is worth a trial, if analogies are good indices.

Wes. Far. & Gar.]

To the Ladies.

In our last, we promised to give some hints respecting the laying out and arranging ornamental grounds, for those in moderate circumstances. If persons cannot afford to call a gardener, and have not much leisure to give it themselves, they had better not undertake with the more delicate species of shrubbery or flowers, however tempted by their beauty; but select such kinds as will thrive and make the most show, with the least care and attention. The whole class of roses, with some few exceptions, are of this description. They are easy to be obtained, increase rapidly, and though well repaying a careful cultivation, will still flourish and bloom under almost entire neglect—among these we will mention the Ohio Multiflora, a flower indigenous with us; and though a rustic bell, scarce exceeded in beauty by her more cultivated sisters of the name. It will grow either from cuttings or seeds, and so rapidly as in a short time to overtop the trouble of setting it. The same is true of the fragrant sweet briar—a delightful ornament, and yet so hardy as to be almost regardless of soil or cultivation. The scarlet trumpet creeper (we won't trouble you with the name) is a plant that abounds along our high-ways and hedges; very showy, and so rapid of increase as to be a terror to farmers. It answers a fine purpose for overgrowing and concealing unsightly spots about your premises, and for planting on the north side of houses, where more delicate shrubbery often languishes. The various species of honeysuckle are also very easy to be obtained, as they will all grow from cuttings and take care of themselves with very little attention of yours.

It is well for you, if you intend to keep shrubbery, to have a little nursery of your slips and cuttings in some shady nook; where you can weed, water, and tend them all together. Do not crowd them so close that they will not have room to grow, for sometime before you remove them. Very young slips, or shrubbery, planted here and there along borders, requiring twice the time and care, besides being liable to many accidents. Choose, if possible, a spot where your young proteges may have the morning sun, but be sheltered from the heat of the latter part of the day. Cut your slips just below a bud,—for every bud contains the rudiments of a root. In this way you may raise all kinds of roses, altheas, honeysuckles, all the varieties of lilac, seringa, and flowering almonds, with very little time, trouble, or expense. The best time for setting out such a nursery, is in the early part of the spring, when showers are frequent. Slips set at this time require far more care and tend.

But the department of the garden on which you may rely most for elegance, variety, and constant succession, is undoubtedly the annuals.

In regard to the raising of these, it is best to plant them together in a sort of nursery—designating the kind by labels. This bed you can protect with brushwood from the ravages of domestic fowls, and other invaders of flower borders. This bed should be in a dry and warm situation; for the long rains which occur in the spring of the year often seriously damage and retard the growth of early planted seeds. If the season be dry, you can water the seeds occasionally at evening, for moisture, as well as heat, is indispensable to vegetation. When the seeds are up, and before they have time to strike deep, remove them in little beds with a transplanting trowel—taking care to have the earth well around the roots. Transplant,

if possible, when the skies give promise of a shower—but if your plants come up to a proper state for removal, and the skies do not seem disposed to accommodate you, transplant in the evening; water and protect them for a day or two from the heat, by covering a flower pot over them, leaving it off at night for the benefit of the dew.

In planting annuals it is a common mistake to set too many in a bunch. Perhaps four or five plants set together, and the consequence is that all are small and puny. After your plants begin to develop themselves, weed out the more slender ones, and leave only one or two in a bunch. Plant your different bunches at a very good distance from each other, with reference to the space which each will occupy. Thus we have seen a thrifty double hollyhock, in good ground, spread over the face of more than two foot all around. In many borders the flowers are crowded, and the general effect of them much injured, by not calculating beforehand the growth of each species. Flowers should be set, too, with regard to the effect of their colors in a border, with as much care as you would arrange them in a bouquet. Pale and delicate flowers should be enlivened by brighter ones; and gay flaring colors relieved by rich blues. Thus the dark maroon tones of the scabions, or the deep blue of the larkspur, contrast finely with the golden tints of the corncockle or marigold.

In the department of creepers there are many annuals capable of producing sudden and beautiful effects. While your honeysuckles and roses, &c., are in training, you can produce an immediate and very beautiful substitute in the scarlet beans, purple pea, and the varieties of convulvulus, and many other annuals of the kind. In the garden of Mr. Jackson, near the Cliviot, may be seen seven or eight varieties of creepers, extremely beautiful and rare, and some of them possessing a freedom and rapidity of growth, that renders them worthy the attention of those who wish to witness some immediate results from their horticultural efforts. Some of these grow from seeds, and others from roots, which increase very rapidly. We recommend all our fair friends who wish to procure something rare and beautiful in this department, to examine his collection.

If, after reading these few lines, any of your readers say, "after all, this raising of flowers is going to be too much trouble!" We say to them—only try it—get your husband or brother, or hire some one to lay out a border and begin; and if you do not find after a time, that nothing seems to be trouble that is with a willing mind, we are much mistaken. —Wes. Far. & Gardener. H. E. B. S.

Modesty.

Who shall win the prize? There was a meeting of the flowers, and the judge was appointed to award the prize of beauty. "Who shall win the prize?" asks the rose, proudly stepping forward in blushing beauty, with full assurance of its winning word. "Who shall win the prize?" asks the rest of the flowers as they come forward, each conscious of its attractions, and each equally sure of receiving the award. "I will take a peep at the assemblage," thought the violet, not intending to make one of the company, "and see the beauties as they pass." Just as it was raising its modest head from its humble and retiring corner, and was looking in upon the meeting, the judge arose to render his decree. To the violet, says he, I award the prize of beauty, for there is no trait more rare, none more enchantingly beautiful, than—Modesty.

Time.

It is a truism that time passes rapidly away. The wheel is constantly revolving, and carries with it our griefs and our joys—and finally life itself. The ancients represented Time with a forelock, to show that it should be seized without delay, and that if once lost, it cannot be secured. The duration of a man's life should not be estimated by his years, but by what he has accomplished—by the uses which he has made of time and opportunity. The industrious man lives longer than the drone—and by injuring our body to exercise and activity—we shall more than double the years of our existence.

"The hundreds of idle young men scattered throughout the country, and lounging about in our large towns, furnish indisputable evidence that many of the rising generation are contracting habits which, in after life, must cost a large portion of sweat and wretchedness. Labor is not respected as it should be, and the consequence is, that idleness takes the place of industry, and poverty, gloom and wretched, that of cheerfulness and content."

The produce market is not very brisk at present.

THE GENESEE FARMER

AND GARDENER'S JOURNAL

J. B. BATEHAM,
F. B. CROSMAN, Proprietors.

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} M. E. BATEHAM, Editors.

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An Apology for Correspondents.

It is well known that most of our correspondents are practical farmers, and with most of our readers we are sure this is sufficient excuse for their not writing more at this season of the year. In the mean time, it gives us an opportunity to select some choice treasures from the columns of our contemporaries. We trust, however, that our old friends will improve the time afforded by a rainy day, occasionally, so as not to allow our readers to forget them; and as soon as the hurrying season is over we shall again exhibit a goodly number of honorable names.

One More Call.

Some post masters and agents deserve our thanks for the honorable manner in which they have responded to the call in our last. But there are many others still behind hand, and as we dislike to be personal, we hope they will remit the amounts due without delay, and save us further trouble.

"Thou shalt not steal."

It does but little good to scold, but really the way our pockets are picked by some persons in the matter of postage is hardly endurable. One writes from Ohio that his paper has misdirected or lost, another in Michigan asks some unimportant question for his own benefit, and each robs us of two shillings! A gentleman (?) in Canada writes a letter entirely for his own benefit, and encloses a business card, making double postage and cheating us out of three shillings. Another orders two copies of the Farmer and encloses a dollar bill, which is at a discount of from 7 to 10 cents, and then subjects us to double postage in the bargain.

Some of our Canadian neighbors seem to forget that there is any postage on letters in this State; and others remember it to but little purpose. We have on several occasions received letters containing one or more small bills, and then a ten cent piece enclosed "to pay the American postage!" Where-as the postage is charged on each piece, with her large or small, and the ten cent piece just paid its own postage and no more! The people of Canada generally, and even many of the post masters, do not seem to be aware that the law allows American postage to be paid together with the Canadian, at the office where the letter is deposited. All that is necessary is, for the post master to mark on the outside the amount so paid. We hope we shall not soon have to write another homily on this text.

Harvesting and Thrashing Machines.

"Pitt's Grain Thrasher and Separator" is now in operation near this city; and, as in other places, is gaining the approbation of the farmers who witness it. We are happy to announce that Mr. Pitts is making arrangements to manufacture the machines in this city.

One of Hussey's Harvesting Machines has just arrived in town, and measures will be taken to afford the farmers of this vicinity an opportunity for seeing it in operation. Mr. Hussey is now manufacturing his machines at Auburn, and will soon be ready to supply orders. More about these machines next month.

A New Oil Plant.—The *Madia sativa*.

The superintendent of the Belfast (Ireland) Botanic Garden, presented Mr. Bateham a package of the *Madia sativa* seed. Part of this was sent to the Hon. H. L. Ellsworth of the Patent Office, who requests us to publish some information concerning it. The best account of this plant we have seen, is in London's Magazine of Gardening for March, 1839, from which we gather the following:—

"M. Bosch, superintendent of the gardens of the king of Württemberg, has made numerous experiments for many years on acclimatizing exotic plants, during the course of which one plant, *Madia sativa*, attracted peculiar attention, as he found from the reports of travellers in Chili, that it is cultivated in that country as an oleiferous plant, and an excellent oil is extracted from it. During the last few years, M. Bosch has given this plant a fair trial on a large scale, at considerable expense; and the results of this trial have surpassed his most sanguine expectations."

It is an annual plant of the natural order Compositae, growing to the height of one and a half to two feet. The seed should be sown in the spring, on rich soil, at the rate of about 7 lbs. to the acre. The produce is about 1,500 lbs. per (English) acre; and 100 lbs. of seed yield about 33 lbs. of oil.

"According to a chemical analysis, 100 parts of the *Madia* oil consists of 45 parts of oleine (or fluid part of the oil), 40 of stearine (the mucilage, or fatty part), and 15 of glycerine (or sweet solid part, a honey like and glutinous substance). This oil does not congeal at 19° below Reaumur, but only becomes a little less keeping all sorts of machines in order; and there can likewise be a solid and well lathering soap made of it. That it may be advantageously used in cloth manufactory has been proved by experiments already

made, by which it was found preferable to the olive oil, which had been previously used."

"For all these reasons, it is to be hoped that the *Madia sativa* will soon take that place in agriculture, to which, by its usefulness, it is justly entitled; and which, also, the king of Württemberg has already acknowledged, by rewarding with a gold medal the merit of M. Bosch, in introducing a plant into field culture which promises to become uncommonly useful, not only to our agriculture, but to our manufactures and trades."

We should be pleased to hear whether any experiments have been tried with this plant in the United States.

The Striped Bug.

Several correspondents have inquired us with answers to the inquiry in our last, for an effectual mode of protecting vines from the striped bug. We give the substance of these methods, although they are not new, and we know from experience that most of them are not fully effectual. In a season like the present, however, when the bugs are not very numerous, these preventives may answer the purpose.

1. Water the plants with a decoction of tobacco.
 2. Spread tobacco stems, or refuse tobacco, around them.
 3. Sprinkle the plants frequently with water in which barbed lances have been soaked a few days.
 4. Spread soot upon and around the plants.
 5. Apply ashes, plaster, or sulphur, in the same manner as the last.
6. The last and most effectual, if not the most easy: get up—we mean go out—early in the morning while the dew is on their wings, catch them, and with the thumb and finger, pinch off their *mandibles*. Or administer a dose of the Frenchman's flea powder, thus:—

"First den, you catch de flea;
You pour some litle powder down he trost;
Begar he choke!"

Farmers, don't Sell your Ashes.

MESSRS. EDITORS.—According to late discoveries in Agricultural Chemistry, Professor Liebig says, that in taking the hay from meadows, the principal cause of exhaustion to the soil, is the loss of the potash contained in the hay; and that this may be readily restored by sowing the meadow with a thin covering of wood ashes.

I once heard a very successful farmer say, that he never suffered a bushel of ashes to be sold from his farm—that it was worth 50 cents a bushel to sow in grass and corn.

SENECA.

Clarifying Maple Sugar with Indian Meal.

W. S. Tupper, of South Venice, informs us that he tried an experiment according to the directions in our April paper, for clarifying Maple Sugar by the use of Indian meal. Owing to the advanced state of the season, the trial was not very complete; still, the result satisfied him that a quality of sugar can be produced in this way, far superior to that clarified in the old way by the use of milk and eggs. He advises sugar makers to give it a fair trial next year, and publish the results.

The Curculio.

We are but partially acquainted with the Curculio. Its manner of providing for its young by depositing the nit in our stone fruit, may be familiar to most of our readers,—together with several other particulars; but its food after it has passed into the perfect state, its place of abode during the autumn and winter, and the age it may attain, are things which appear to be very imperfectly known.

If the life of this insect extends to several years, the chief advantage to be derived from having hogs and geese under the trees must be to prevent its increase. A few of the old ones indeed, may be trampled to death; but in a large fruit garden, it is likely that most of the young ones will escape; and if to these we add such as immigrate from other places, there will be an increasing army of them in the trees, beyond the reach of the hogs, geese, and poultry.

That such has been the case in our fruit garden, we are much inclined to believe. Six years ago, the hogs were not permitted to run there; and without doubt many hundreds of young curculios were added to those already in possession. We have lately undertaken to lessen their number by catching them on sheets; and we now have about 1700 on the list.

From their difference in size, we infer a difference in age. Further proof indeed, is wanted; but some of them are not less than four or five times as large as others. If they live through a period of years, they must continue to provide for their offspring in some kind of stone fruit. If we exclude them from the plum tree, the apricot, and nectarine, they will attack the peach and the cherry. The latter indeed suffers annually to some extent; and a few years ago, owing to a scarcity of other fruit, our peaches were almost entirely destroyed by them.

These considerations have induced us this season to pay more attention to them than in years past; and we have been surprised to find them so numerous. In a late article on this subject, we proposed to jar the trees before the tin troughs were put up; but one, or even a dozen jarings are not sufficient to get them all down. The troughs therefore, should be fixed and filled, very early in the season, before the insects descend the trees, or the labor may be vain. We offer some proof of this remark: For nine mornings in succession, some of our trees had been repeatedly struck with an axe, so as to produce violent concussions, each time obtaining a goodly number of curculios; and yet on the tenth morning, from the same trees, we caught more than double the number that we had at any other time, owing to the cold which benumbed them, and rendered them less able to hold on. From the same tree we have since obtained many more.

Some persons have doubted the efficiency of water troughs; but from what we have seen of them, our confidence has not been diminished in the least. We have frequently caught curculios on the rim, as if waiting for a passage; and have sometimes found them in the water perfectly helpless. Now to prevent them from climbing up, is all that we can reasonably expect from a water trough. It cannot bring them down.

For large trees, the expense of these fixtures will be greater than on small trees, the amount of materials to make them being greater. If a sufficient space be left between the trough and the tree however, it may remain several years without being taken down—a hole being made in the bottom as soon as the curculio season is over, to let off the water which might collect there, from rain or from melting snow. A small chisel, cutting through the tin into a block of wood held firmly under, would make a sufficient aperture, which might be closed the next spring, and secured by a drop of solder. Three or more wedges pushed up between the trough and the tree fastened

by small nails, support the trough; and rags or tow stop up the remaining vacancy. We cap the whole with a coat of mortar to prevent the insects from working their way through the crevices.

Hogs sometimes neglect to eat the fallen fruit when it is very green; but shorter combs will generally bring them to their duty. If the fruit lies long under the tree, the worm escapes into the ground.

Locality of the Canker Worm.

The Nashville Agriculturist (as quoted in an exchange paper) recommends taking up the earth round fruit trees to the depth of six or eight inches, and to the distance of eight or ten inches, for the purpose of burning it, in order "to destroy the germ of the canker worm." Is the canker worm an inhabitant of Tennessee? Perhaps some of our readers can inform us in regard to this particular; and also the boundaries of that district on which the genuine canker worm (*Phalena vinana*) is found.

Dennis in his New England Farmer or Georgian Dictionary says, "It is not less than about fifty years since this insect began its predations in New England, in the parts which had been longest cultivated. But perhaps there is some reason to hope that Providence is about to extirpate them: for a little bird has lately made its appearance in some parts of the country, which feeds upon the canker worms. Should these birds have a rapid increase, the insect will be diminished, so as to be less formidable, if not wholly destroyed."

The second edition of that work was issued in 1797, "soon after the first," and perhaps we may set the time of their first appearance about one hundred years ago. It will be safe to conclude they were not newly created about that time, however; and we may ask whence they came? or what other tree supplied them with food before that period?

The little bird was doubtless the cedar bird—one of the greatest marauders of our land; but having no canker worms for him to feed on in this district, we should be glad to send him where he might find useful employment.

From Western Farmer.

Best Method of Improving New Farms.

If heavily timbered with oak, maple, beech, bass wood, ash, &c., together with a heavy growth of undrained or brush, the best method in the opinion of the writer, or at least that has fallen under his observation, to clear such land as, if it be undulating and dry, to enter in the months of June, July or August, upon the land to be cleared, when the leaves are large and full, with axe and bush hook in hand, and cut down all the trees and brush of less size than six or eight inches in diameter, on the first five, ten, twenty, or more acres, according to the means at command, leaving the larger trees standing.

Trim up the fallen trees by lopping off the branches, and then cut up your branches into suitable lengths for rails, or to be thrown together into piles for burning, leaving the brush scattered over the surface of the ground to dry. The next step recommended, will be, after the leaves have fallen from the trees in the fall of the year, and before the birds start out in the spring, to girdle the timber or trees left standing so effectually as to kill them; and as soon thereafter as the weather will permit, (if the season be favorable, the last of April or first of May,) put fire to your "fallow," and the probability is, you will get a "good burn." When once cleared off, put on a brisk team of young cattle or horses, and harrow up your land thoroughly till it becomes mellow and pliable to the hoe; you may then plant it in corn or potatoes, or sow it to oats or other spring grain, at your option, or as your wants may dictate. If you sow to oats, you can immediately seed down after them to "thorough grass," "red top" or "clover," which will soon furnish your farm with hay for your stock of cattle, &c. Nor will the "girdlings" become dangerous to your cattle, or prove detrimental to your crops for the first three or four years, and in the mean time they can be cut down and used for rail timber, or fire wood, and being dry, can be burned out of the farmer's way at

almost any season of the year when he may have the most leisure time to do it.

It being generally the case with those hardy industrious men who most frequently break in upon new farms, that they are limited in their means, and having families to support, and some of them large ones too, they require a quick return of the outlay of their small capitals. And this method of clearing the first forty acres of timbered land, if pursued, will place a family in circumstances to raise their own food for consumption, sooner than any other, as much labor, time and expense are thereby saved the first year or two, while the new farmer is beginning to grow with everything new ground land. If "openings," "prairies," or "blains," are to be worked, where there is a heavy coat of barriage upon the ground, and no obstacles in the way of the plough, in the month of June or July enter upon the land to be broken up with a sufficient team to turn over the sward with ease, while the wild grass and herbaceous yet tender and vegetating.

The depth of ploughing should be regulated according to the depth of the soil. And as a general rule, prairie can be ploughed deeper than either openings or the yellow plains. "Onk openings," the first ploughing should be turned over to the depth of about six inches, and great care must be taken to turn a "clean, hardpan surface," so as to cover entirely the vegetable matter, for once more well ploughed and tilled, is better to the farmer than half done, and if the *ribby* bill is suffered never to enter the habitation nor the field, and proper care taken, the firm work is sure of being not only seasonably but well done. The land thus ploughed should be suffered to lie in fallow, undisturbed until the following spring, when it may be cross ploughed, harrowed and prepared for spring crops.

It may be well, perhaps, here to advert to one reason why the first ploughing in openings or plains, where the sub-soil tends to clay should not be made too deep. Argillaceous soil, in its natural undisturbed state, lies in a compact firm layer, and is of a cold sour nature; and as new beginners are somewhat impatient for early crops, they cannot wait for the seasons with their accompanying attributes of heat and frost, shower and sunshine, to modify and subdue the natural sourness of a clayey soil, if ploughed to the depth of ten or twelve inches at first, so therefore, as soon as the vegetation and mould which were turned under at the first ploughing, have sufficiently rotted to mix with the under soil that was turned up, and which being thin, (if ploughed but six inches,) and lying over a compost formed of the vegetable matter soon matures, by exposure and the air changes of the weather, and will if planted or sowed, yield a tolerable crop, the time is improved by the new beginners, to avail themselves of the earliest possible harvest. And furthermore, as all newly cultivated lands, if properly managed, will yield a yearly increase of the products of the soil for the first five or six years; the depth of ploughing can be gradually increased without materially lessening the productive of the crop. At the same time the farmer is receiving a rich reward for his care and labor. As I have already occupied a larger space of your useful columns than may be interesting to most of your readers in partly answering a short inquiry, I shall close by observing that if your "Tuscola" correspondent, "O. S." needs any further information on the subject, after he shall have cleared or broken up the first ten acres of land, by so intimating through the medium of the Western Farmer, he can be accommodated by "CINCINNATUS."

Leopold County, March 20th, 1841.

Millet.

Culture.—This plant will grow upon any soil of tolerable richness, though it does best on loam. The ground should be prepared as for ordinary crops. The seed should be sown broad-cast, and covered with the harrow. If sown early, the crop may be gathered in August, though if sown any time before the 25th of June, it will come to maturity. If seed is the object, four quarts of seed to the acre will be enough; but if intended principally for cattle feed, the quantity of seed may be increased to eight quarts. It grows to the height of from two to six feet, according to the quality of the soil. Birds are fond of the seed, and devour it as soon as it begins to ripen. The crop should be therefore cut before the whole has matured, and while the straw is green. It may be cut with a sickle, scythe, or cradle, and should be housed as soon as it is sufficiently dry.

* When *Falder* is the chief object, *Mills* may be sown in July—E. N. G. Farmer.

Product—The product will be according to the soil, and will vary from ten to thirty bushels of seed, and from one to three tons of forage, on the acre. It sometimes produces more than a thousand fold returns.

Uses—We have found it an excellent substitute for corn, in fattening hogs, either ground or boiled; and if ground would probably be useful for neat cattle and horses. The straw is eaten freely by cattle, and both the seed and straw abound with nutritious matter.—*Albany Cultivator*.

The following opinions were advanced by Messrs. Colman and Buckminster, at the Agricultural Meetings in Boston:

"Millet was both grass and grain. Mr. C. had himself raised it at the rate of three tons to the acre. It is an annual plant, and is useful when other crops fail. He had known millet sown in August, and a good crop obtained after the crop of hay had been cut off with dry weather. Cattle prefer it to almost any other kind of hay. When mixed it is a valuable grain, weighing from thirty to forty pounds to the bushel."

"Millet he (Mr. B.) believed a great exhauster of the soil; it probably would not exhaust so much when cut for hay before it was ripe. It could not be profitably cultivated in this country for any other than a late crop."

For the New Genesee Farmer.

Agricultural Societies—The Act of 1841 "To Promote Agriculture."

Messrs. Editors—There has been much difference of opinion amongst practical farmers, as to the utility of Agricultural Societies. Some have said they are altogether too partial in their operations, excluding from competition all, or mostly all, of those who have not ample pecuniary means of preparing subjects for exhibition and premium at the annual fair. It is urged that the principle on which premiums have been awarded, is instead of rewarding skill, economy, and good husbandry, has encouraged a few individuals to vie with each other in pampering a select number of animals, while perhaps their average stock may in consequence be behind ordinary allowance, and be of the most common description. Some have bestowed all their manure on one or two acres, and by great expense of time and pains extorted a great crop of grain or roots, while the remainder of the farm has lain with corresponding neglect; and finally, he who has succeeded in cramming the most pudding in to a pig, or has been able to draw the milk from the greatest number of cows with one calf, has, as a matter of course, drawn the premium. Sir, how have you or I felt this last animal of yours? Oh, he has never had more than he could get, has been in some cases about the necessary amount of scrutiny and investigation as to method and means.

Two men who, regardless of expense, obtain the greatest crop from an acre or half an acre, will accomplish the same result. The same may be said of the otherwise frugal housewife, who neglects important domestic duties, in order to produce a highly wrought pair of silk stockings or a curious hearth rug.

These objections I confess are not altogether groundless; yet, upon the whole, agricultural societies, with all their errors of management, have stirred up a spirit of emulation, showed farmers what can be done, and been of great benefit to the interests of agriculture. I think the friends of improvement may felicitate themselves on the final attention which this subject has received from the legislature, and the passage of an act, which if carried out according to its true spirit, will obviate these objections, and place every one within the sphere of fair competition.

Although the allowance provided in this act is very limited; yet, as an incipient step, it is much better than no action; and it is to be hoped that the importance of the object will stimulate our farmers promptly to co-operate in making up the duplicate to this fund.

I propose to make a few remarks on section 3d of the act, which will be found entire in the June number of this paper,

Mention is made of "articles, productions and improvements, best calculated to promote the agricultural, household, and manufacturing interests of this State." All articles seem to be excluded from exhibition for premiums, except those which fulfil the above intention. The officers of the society are to have "special reference to the net profits which accrue or are likely to accrue from the mode of raising the crop or stock, or the indication of the article thus offered, with the intention that the reward shall be given for the most economical or profitable mode of competition." The above clause seems to embrace the true principle on which agricultural societies ought to operate and premiums be awarded. Faiming in general is not carried on as an amusement, but as a source of profit, as an agreeable and healthy employment. The data which are to determine "net profit," seem to be perfectly evident. He who succeeds in eliciting the most animal or vegetable nutriment from a given quantity of material, with the same economy of time and labor, shows the most skill; or, in other words, he who can produce a fine crop or a fine animal at the least expense of means, will reap the most "net profit." It is well known that two animals of the same age and weight may be placed in separate pens, each may be fed the same quantity of grain or roots—at the end of a given time weigh and examine these animals and there will be found a difference (sometimes very great) in their weight and form.

The only possible circumstances which can produce this difference, are as follows:—

1. Method of preparing the food.
2. Time and manner of feeding.
3. Constitution of the animal, which embraces,

1. Voracity of appetite, which makes them what are termed "good feeders."

2. Power of the digestive and assimilating organs, by which a greater quantity of chyle is elaborated from the same aliment in some animals than in others.

In regard to field crops, it is likewise known that the most striking difference in the appearance and produce is sometimes only separated by a division fence. This is caused,

1. By the previous condition of the land, quantity and quality of manure applied.
2. Season of the year when manure is drawn and method of application.
3. Number of times and manner in which the land is ploughed and harrowed.
4. Preparation of seed and mode of planting or sowing.

5. And lastly, time spent in tending the crop and manner of doing it.

A proper discrimination is required to hit right in every particular, and so adjust the labor and expense as to secure a profitable crop. The more skillful and judicious consideration of the above circumstances, can alone render one man more successful than another. Here is ample scope for the exercise of thought and experiment; and the man who by well directed and careful experiment, establishes some principle in the rearing of stock, or cultivation of the soil, and in proof of this principle brings forward to the Fair a specimen of production, which not only excels, but has yielded a handsome "net profit," will, by imparting his peculiar method, confer benefit on the whole farming community. In pursuance of this latter consideration, the act goes on to provide that the "person claiming the premium shall deliver in writing, to the president of the society, as accurate a description of the process of preparing the soil, including the quantity and quality of manure applied, and in raising the crop, or feeding the animal, as may be; and also of the expense and product of the crop, or of increase in value of the animal, with the view of

showing accurately the profit of cultivating the crop or feeding or fattening the animal. This latter clause strikes at the root of the whole matter. It excludes all mere fancy farmers, who by dint of money can exhibit some huge animal, or produce an enormous crop from a few rods of ground.

It will be seen I think, that the spirit of the law is to give the "race to the swift and the battle to the strong," and as far as can be, reward and encourage genuine merit.

Farmers of 1841, why are you not still muzzling over the surface of your farms with the old bull plough with wooden mould board, and putting in your grain with the triangular harrow of nine teeth? Who amongst you now, who if your stock is not all thorough bred, have not a sprinkling amongst your flocks and herds of some of the best blood in Europe? To whom are you indebted for the amazing improvement which has taken place in farming for the last twenty years? To the ingenious, to the enterprising, to the men who were willing to hazard time and means in doubtful experiments—many important hints on which you are almost unconsciously practicing with success, you can trace to these men—men of thought, men of persevering exertion.

I need not say that real excellence in any department of business is not the result of accident, or blind chance. It must be the fruit of cool reflection, of "patient thought." The brilliant emanations of genius, like those luminous appearances in the heavens which sometimes occur, may dazzle and surprise and excite our admiration; but most of the great practical improvements in the arts which have raised men from barbarism, have been the fruit of laborious exertion, of protracted experiments. They have caused much racking of the brain and many sleepless nights.—These remarks apply as well to farming as to any other pursuit. The door of improvement is still open—let the tide flow on. Every farmer, if he studies his own interest, will become a member of the county society; and if he has not the taste or the time to devote to agricultural experiments, let him cheerfully contribute a little for the encouragement of those who, for his benefit, are willing to search out the most successful and economical method of raising a crop, and will be at the pains of introducing the most improved breeds of horses, cattle, sheep, and swine.

Ogden, June 10, 1841.

J. B. SMITH.

For the New Genesee Farmer.

Starlings Poisoned by the common Red Cherry.

Messrs. Editors—Some six or eight years since, while carrying on farming at Rock Stream, one of my orchards, in which was a variety of fruit trees, including a number of the common red sour cherry, became covered with a luxuriant growth of grass, to destroy which, I turned in, about the first of September, fifty or sixty merino sheep. The animals seemed unusually fond of eating the young cherry sprouts which had sprung up very thick under and about the cherry trees. In less than an hour a large proportion of them were discovered to be diseased, and they were immediately turned out. They staggered continually, pitching forward upon their heads, and often turning entirely over upon their backs. In the course of two or three hours several of them had died; the remainder gradually recovered.

Post mortem examinations proved that their stomachs were compactly filled with the leaves of the cherry sprouts, containing, I presume, prussic acid sufficient to destroy animal life.

E. BARNES.

Note.—A neighbor of mine lost a cow from her eating the leaves of a cherry tree, which had been blown down by a wind storm.

Geneva, May 29, 1841.

E. D.

Exercences on Plum Trees.

We first observed the *new* exercences on plum trees about the 13th of last month; but as vegetation has been unusually backward, it is probable that in other years, they will appear much earlier. The worms in some of these bunches are more advanced than in others.

The more we see of the works of this insect, the more we are satisfied it may be easily kept in check, or entirely destroyed. Excepting the few that migrate, it seems not much inclined to wander from its native tree, unless others are very near. Where it attacks plum trees with thick branches, the proprietor may find an advantage in cutting out a part with all their leaves and fruit on.—because he can find the bunches so much more readily, and because the fruit that remains will be finer and more valuable. Summer pruning is much approved by some horticulturists.

Possibly some of our readers may think we are bestowing an undue share of attention on this subject. We don't think so. We expect the most indolent will be the first to complain; and it is this class that we more especially want to stimulate into action. Get up half an hour before the usual time—steal away from a noon spell to attend to it—take the neighbor that comes to spend an idle hour along to see the operation and to assist—it will do him good—and the plum trees will be saved from ruin.

Even as late as when our paper makes its appearance in these northern parts, it is probable that many worms will still remain in their nests. Cut open the bunches, and see if it is so. If any are found, destroy them. If half of them are stopped on their way to mischief, it will be something of great value, not only as it gets a man's hand into the business, and prepares him for doing his duty next year, but he will have much less to do.

Rust on Wheat.

A well written paper on the cause of Mildew, Blight, or Rust, was lately read before the Philadelphia Society for Promoting Agriculture, by Kenderton Smith, in which he endeavors to show that this malady is occasioned by sowing grass seed amongst the wheat. We have no doubt however, that in different seasons, and different circumstances, the presence of rust may be owing to more than one cause; yet, if sowing grass seed with wheat, often, or generally produces it, it is a most important discovery.

From this paper, (published in the Farmers' Cabinet,) we make the following extracts:

"The wheat of several fields which came under my observation [in 1835] and which had not been sown with grass seed, was good, the straw bright, and the grain of excellent quality. I also remarked, that other fields which were sown with grass seed, and indeed the crop generally throughout the county was greatly injured, and in most instances, utterly destroyed by mildew or rust. What rendered very remarkable was, that we heard of excellent crops which had been raised in the very midst of this ruin and desolation.

"In the summer of 1835, I was appointed by the society, one of a committee to examine a reaping machine, then recently invented. We visited the farm of Mr. John Fox, of Oxford township, Philadelphia county, for the purpose, where the machine was put in operation upon a field of eight acres. This grain was remarkably fine in all respects: It was tall, and much of it was lodged, yet the berry was perfectly filled, and the straw was in no respect touched with mildew. There was no grass sown with this grain; and I have since learned that Mr. Fox and his brother have for many years, always sown their wheat without grass, and that their crops have been uniformly good.

"Adjoining this field was another in wheat, the straw of which was tall, and the growth of which had been apparently as vigorous, but the grain was shrunk and of little value. This field was sown with timothy the previous fall, and with clover in the spring, and this ground was covered with a thick and

healthy coat of these grasses. The soil, situation, and advantages of these lots, for the growth of wheat, were to all appearance the same. There was another field of wheat on the opposite side of Mr. Fox's field, and only separated from it by a road, which was also utterly worthless from mildew. This lot had also been sown with grass, and there was a strong growth upon it. Here then was a field of very superior wheat, situated between two other fields which were scarcely worth cutting.

"Within the last two years I have heard of many instances of good grain, and but one instance of mildewed wheat having been produced on lands not sown with grass, or on which there was not a strong growth of grass or weeds. In every case of mildew during that time, I have ascertained upon inquiry, that grass had been sown with the grain, or prevailed to considerable extent naturally.

"I do not wish to be understood as stating that the presence of grass always produces mildew or rust; for I know that good crops of wheat have grown with it in dry seasons; but I do contend that the presence of a thick growth of grass or weeds upon the surface of the land, predisposes the crop to disease or mildew, and that in wet seasons it is almost invariably noxious and hurtful to the wheat plant.

"P. S. I am informed by Mr. Isaac Newton, an active and zealous member of the Society, and one of our most enterprising farmers, that he had last year, a field of about eight acres of wheat, which he sowed in the fall with timothy and herd-grass, except one land, nearly in the middle of the field, which by accident was omitted. The wheat upon this land was not affected by mildew, and the grain was of superior quality, while the rest of the field was rendered worthless by mildew."

The foregoing statements are very interesting; but we would refer our readers to an able article on this subject, published in our current volume, at pages 38—50, which is worthy of a careful perusal. Now is the season for farmers to make observations in regard to this matter. Let them take notice, in addition to the above suggestions, whether stable manure is favorable or unfavorable? Whether compost, including a portion of lime, has a bad effect? Whether head-lands in fine tilth, but sodden hard after the wheat was sown, are more free from rust? Whether this fungus often spreads from low wet places into the drier parts of the field? and whether it rarely occurs under the shade of trees? The satisfactory determination of these points may lead to very important results; and we should be pleased to hear from correspondents on the subject.

"S. W." and the Corn Laws.

To the Editors of the New Genesee Farmer:

Your correspondent, "S. W." appears to have paid much attention to the subject on which he treats; but, on the whole, his speculations are much better adapted to the state of information and feeling which existed fifty years ago, than to the present time.

While every laborer must, as he ought, acquire by his daily wages sufficient to clothe and educate respectably his family and provide something for future use, it will be difficult to convince our farmers that their profits will be increased by the "low prices of agricultural products." It may be replied that this will regulate itself—that the cost of labor will be proportioned to the prices of the articles produced; but this is not true, except in part; and can only be the result of great uniformity in the cost of the articles consumed, according to their value. For instance, if the bulk of our importations are purchased at high prices, the wages of the working man would doubtless exceed the means of the farmer to pay, if wheat was at a low price.

It is gratifying to observe, notwithstanding the lessons of patience read to us by "S. W.," and his conclusion "that we have no right to complain of the English Corn Laws, which save her agricultural interests from utter prostration and ruin," that the spirit of free trade is spreading in England as well as this

country. He has doubtless observed, that though generally opposed by the landed interest, which seeks but its own selfish ends, regardless of the claims and sufferings of community, a mighty movement has taken place, which must result in the repeal of those laws, at no distant period. When this takes place, it must be obvious that the market for our wheat will be much better than at the present.

If "S. W." will take into consideration the unlimited capabilities we possess of producing this great staple, and the certainty that in a few years at farthest, our market will not be adequate to the supply, he will agree with Gov. Davis, of Massachusetts, in saying, "that the policy of our nation in sustaining the cotton growing interest to the neglect of wheat, is unwise and unjust."

It has often seemed passing strange to me that so little has been done to promote the prosperity of millions at the North, in this important particular, when a few hundred thousand men at the South have an accredited representative at the Court of St. James, watching every movement which may affect in the slightest degree their favorite exports.

But there is another aspect to this question, to which I would direct the attention of your correspondent. He thinks we have no right to complain when the landed interest seek their own protection; but did he ever reflect that this protection was the cause of want and misery incalculable? It is not the only rent of this system, that the English laborer is absolutely precluded from any higher expectation than providing a scanty support for his family; thus extinguishing those noble incentives to exertion, which lie in the path of the humblest individual among us; but let him bear in mind, that no small share of the people of that country, from the operation of those laws, inhabit damp and noisome cellars, crowd in an incredible extent every garret and bowel, and drag out a most miserable existence, that "the agricultural interests" may ride in splendid coaches and feast upon the dainties of the earth. Surely the dictates of philanthropy should outweigh those of cold selfishness. It is however, by no means certain that English proprietors would be the losers by an act of justice and mercy; for, says Lord John Russell in his motion for the reduction of duty on foreign grain, "the safety of free trade has always been considered as an axiom by writers on political economy, and I see no good reason why it should not be reduced to practice."

S. R. W.

For the New Genesee Farmer.

Rotation of Crops—Root Culture.

MESSES. EDITORS—I am often asked by brother farmers how they can change from their old impoverished mode of farming, and adopt an improved system. I say to such, fix on a proper rotation of crops—begin on a small scale till I assure you are right, then go ahead. My rotation for a five or six years' course is, 1st. Peas, on green sward; 2d. Corn or roots, with manure; 3d. Spring wheat; 4th. Oats, and seed with clover, or clover and timothy; 5th. Hay or pasture. I find winter wheat a rather uncertain crop, on account of its winter killing, and therefore prefer spring wheat. The Italian I have found the most productive variety. I have raised more than thirty bushels of this kind to the acre for the last four years, since I have adopted the above rotation; and last year I cut, from one acre, 1019 sheaves, which yielded fifty-six bushels; and I believe I can do it again.

My rye bazaar crop last year was 1530 bushels, from three acres. I kept twenty pigs entirely on them, and four working horses in good condition, without grain. I also fed sheep, calves, and cattle on them. But some farmers say, "my pigs will not eat them;" very

likely. Then boil the roots for them the first day; boil them the next, and the third day feed them raw, and you will have no further trouble.

I raise the carrot and sugar beet, but do not think my land as well adapted to them as to the ruta baga. Last year my white beets yielded about 500 bushels to the acre, and carrots 450 bushels. I should prefer carrots to the ruta baga for horses, if as easily raised; but with me they are more expensive.

Farmers think it costs too much labor to raise ruta baga; but if they will try it, and note the expenses, it will satisfy them they get well paid for it. As I have kept an account with my crops for several years, I have ascertained that more value may be realized from ruta baga than almost any other crop. I give you the account of one acre raised last year, on land which the year previous was sward, turned over and cropped with peas.

Rent of land to cover interest and taxes,.....	\$3 00
Ploughing,.....	1 50
Thirty loads barn yard manure,.....	7 50
Ridging before and after manure,.....	1 50
Planting and seed,.....	1 50
Hoeing and thinning, four days,.....	3 00
do. do. 2 1 time, 2 days,.....	1 50
Horse and man with cultivator, three times,.....	1 50
Harvesting and pitting, two hands and team, } two days,.....	6 50
	\$27 50

600 bushels ruta bagas a 16 cts. \$97 92

Nett gain,..... \$70 42

Cost only $\frac{1}{2}$ cents per bushel.

I call the manure only 25 cts., as it only fits it for after crops, and is nearly saved—I used to make but one hundred loads of rotted manure, and now I make three hundred from the same means.

As many of your readers have never seen the "Ruta Baga Hook," would it not be well for you to publish a description of it from the Cultivator, vol. 7, p. 1211? I consider your paper invaluable to the farmers in this region; as it is more particularly calculated for Western New York than any other; and wish it was in the hands of every farmer.

You may publish any, all, or none of this, as you may see fit. If you wish, I may give you an account of some other crops hereafter; but I can hold the plough better than I can wield the pen.

With respect,
ERASTUS SKINNER.

Prattsburgh, June 18, 1841.

Remarks.—Thank you, Mr. Skinner. We like your mode of wielding the pen, and should be happy to hear from you often. We will show the Ruta Baga Hook next month.—Eds.

Ploughing level Land in broad Ridges.

We have some acres of level land with a hard close subsoil, through which the water soaks very slowly; and sometimes in rainy weather stands for days together in the furrows.—(Why don't you drain it?)—We intend to—one thing at a time; but in the mean time we have been gathering it up into broad lands of fifty feet or thereabouts. This is done by ploughs, repented in the same order, without leveling it back again; and a very fine effect has been produced. Instead of the soil sinking for a month or two during our wet spring, and seeming almost prepared when dry, for the brick-kiln, it becomes light, mellow, and greatly increased in fertility. Crops, double in value, whether of grain or grass, may now be readily obtained.

As the middle part of the land is much elevated, so the dead furrows are proportionately depressed; and in the bottom of these, now a foot or sixteen inches

below the original surface of the land, we intend to make covered drains, perhaps three feet deep which shall freely discharge all the water that soaks down from the lands into them.

In conclusion, we would just remark, that the lands are raised without extra expense or labor, the work being done in the ordinary routine of cultivation.

Locust Tree Insect.

A correspondent in Seneca county informs us that his locust trees are infested with "small insects about a quarter of an inch long," and he thinks they will inevitably destroy the trees, unless we or our correspondents can point out a remedy.

We are not informed in what manner this insect commits its depredations—whether it preys on the wood, the bark, or the leaves—nor are we informed whether it is a worm, a caterpillar, a beetle, or a fly—but it is an insect about a quarter of an inch long! Very definite indeed! Who can tell what it is, or how to destroy it? We know of but one insect that infests these trees, and that is the *locust borer*, which in its perfect state, is a beetle about five-eighths of an inch in length, of a dark brown color, with bright yellow stripes across its wings and body. In its larva state, it is from one half to three quarters of an inch in length, and does its mischief by boring holes in the body and limbs of the trees, so that they break off or die. They first made their appearance in the Eastern states, we believe, about 15 or 20 years ago, and soon destroyed many of the trees there. They began to appear on the trees at Rochester about eight years ago, and in four or five years they destroyed or disfigured nearly all the large trees about the city, and they are still prosecuting their work of destruction.

We have not discovered them in many places beyond the vicinity of the city, but they are doubtless extending themselves, waging a war of extermination against locust trees; and we have no doubt this is the insect found by our correspondent. We only regret that we are unable to offer him a remedy against their ravages. Scrapping off the rough bark and giving the tree a coat of white wash, has been practiced here as a preventive, but with only partial success. They do not seem to increase very rapidly at first, and their numbers can be reduced by picking them out of their holes with a barbed wire. The perfect insect may be seen at this season of the year, running rapidly about the body and large limbs of the tree.

American Society of Agriculture.

We last month published the address of Mr. Robinson on the formation of a National Agricultural Society. We now give a circular and form of a subscription paper received from him. If any of our readers desire to send their names or contributions to aid in this laudable enterprise, we shall be happy to forward the same to Mr. Robinson or to Mr. Ellsworth.

To the Editors of the New Genesee Farmer:

GENT.—The object of the annexed form of a subscription, is to ascertain whether there is a sufficient number of the friends of this great measure in the Union at this time, willing to lend their influence, to warrant a call of a primary meeting to organize the Society. Should the indications appear favorable, a committee of the friends of the cause will take upon themselves the responsibility of naming a time and place for the meeting; of which you will be duly notified.

I fondly hope you will promptly lend your own name, and procure a few names of other friends of agricultural improvement in your vicinity, and then forward the subscription by mail in time to reach Washington by the 10th of August; addressed to the

Hon. H. L. Ellsworth, Commissioner of the Patent Office, for Solon Robinson.

If you are averse to asking your friends to give pecuniary aid to this measure in its incipient state, please make use of the first part only of the paper.

I hope you will charge the liberty I take, to the zealous endeavor I feel in promoting this great National object.

I have the honor to subscribe myself your agricultural friend and humble servant,

SOLOMON ROBINSON.

Lake C. H., Indiana, June 3d, 1841.

[FORM OF SUBSCRIPTION PAPER.]

National American Society of Agriculture.

"To elevate the Character and Standing of the Cultivators of the American Soil."

The subject of forming such a Society, being now agitated in the United States, we do hereby pledge ourselves to the support of such a Society, according to our ability; and we earnestly hope that the active and leading friends of the measure will take the necessary steps to organize the society in the course of the year 1841.

Knowing that funds will be necessary to bring this great beneficial National Institution into active operation, particularly as we hope to see a National School of Agriculture connected with the Society; and also a scientific Journal worthy the proposed name and character of such an institution—those of us who have added certain sums to our names, have freely contributed those sums, and placed them in the hands of a Society, to be expended in aiding the formation of such a Society.

New Varieties of Turnip Seeds.

A large assortment of Turnip seeds from England, have lately been received at the Rochester Seed Store, including, besides the more common varieties, several kinds quite new, or but little known in this country. We extract the following description of some of them from the London Farmers' Magazine.

Green-Topped Yellow-Buttock.—This turnip attains a medium size. Its shape is globular, or somewhat flattened, with a very small tap root; it is a solid variety, and is held in deserved estimation.

Or-Heart Yellow.—is an excellent turnip; although it comes early to maturity, and attains a considerable size, it is by no means deficient in hardness.

Hood's new large Yellow.—is a very superior, large, globularly shaped, lardy turnip, remarkably perfect in symmetry, and has rather a luscious green top. It was introduced by Charles Hood, Esq., an eminent farmer at Inverbrora, Sutherlandshire, a gentleman who has devoted much attention to the cultivation and improvement of field turnips generally.

Pomeranian Globe.—This variety was introduced some years since from Pomerania, and may be considered the most perfect globe turnip in shape, as well as the most regular or uniform grower. Its skin is of a smooth white, and somewhat shining or transparent-like in appearance; leaves smooth, of a dark green colour with whitish veins.

Red Tankard.—In size, shape, and texture, this variety may be considered as occupying an intermediate place between the white and green tankard. It is of a bright red clover on the upper surface, and white on the under.

Lawtown Hybrid.—This variety, which was raised by James Wright, Esq., of Lawtown, near Perth, may be considered as bearing the same relation to the Swede as Dale's hybrid. Its leaves are of a dark green, rather small and smoothish, roots roundish or somewhat heart-shaped, being often tapered at the under side; white below and green above the surface of the ground. They are possessed of more solidity and firmness of texture than most of the white sorts.

Lewisham Green-Topped Or-Heart.—This is an excellent variety, grown in some of the southern districts of England and in Scotland. It acquired its name from having been first introduced by Messrs. Willmott and Co., of Lewisham. In color and shape it very much resembles the Lawtown hybrid, but is somewhat softer in texture and has larger and lighter green colored leaves.

CATTLE SHOW AND FAIR

OF THE N. Y. STATE AGRICULTURAL SOCIETY—TO BE
HELD AT STRAUSS, SEPT. 29 AND 30, 1841.

The New York State Agricultural Society will hold a Cattle Show and Fair at Syracuse, on the 29th and 30th days of Sept., 1841, at which time the following Prizes will be awarded. The Premiums offered, are numerous rather than large, the Society preferring to make their appeal to the emulation and public spirit of our farming population, rather than to that avarice which can alone be called into action by the inducement of large rewards.

List of Premiums.

ON CATTLE.

I. BULLS—Of any breed, 3 years old and over.
For the best, \$20 For the third best, \$5
For the second best, 12 For the fourth best, Diploma.

II. BULLS—Of any breed, over 2 and under 3 years old.
For the best, \$20 For the third best, \$5
For the second best, 12 For the fourth best, Diploma.

III. BULLS—Of any breed, under 2 years old.
For the best, \$12 For the third best, \$5
For the second best, 8 For the fourth best, Diploma.

IV. COWS—Of any improved breed, 3 years old and upwards.
For the best, \$20 For the third best, \$5
For the second best, 12 For the fourth best, Diploma.

V. HEIFERS—Of any improved breed, 2 years old and over.
For the best, \$12 For the third best, \$5
For the second best, 8 For the fourth best, Diploma.

VI. HEIFERS—Of any improved breed, under 2 years old.
For the best, \$10 For the third best, \$3
For the second best, 8 For the fourth best, Diploma.

VII. COWS—Cross between the native and improved breeds.
For the best, \$12 For the third best, \$6
For the second best, 9 For the fourth best, Diploma.

VIII. HEIFERS—Cross between the native and improved breeds.
For the best, \$10 For the third best, \$3
For the second best, 8 For the fourth best, Diploma.

IX. COWS—Native breeds.
For the best, \$10 For the third best, \$5
For the second best, 8 For the fourth best, Diploma.

The greatest combination of those points or properties which indicate milking qualities and an aptitude to take on flesh on the most valuable parts, together with general beauty of form, (size in itself not being considered a criterion of excellence,) will be the considerations which will govern the viewing committee in awarding premiums in the above classes.

ON HORSES.

For the best Stallion, \$20 For the best breeding, \$20
For the second best, 12 For the second best, 12
For the third best, 8 For the third best, 8
For the fourth best, 5 For the fourth best, 5

A variety of horses possessing size, strength, and endurance for field labor, combined with that action which qualifies for the carriage or saddle—in short, the horse of all work, is probably the most profitable class which our farmers can now engage in rearing, and to such therefore, will the preference of the Society be given.

SWINE—Over 10 months old.

For the best Boar, \$10 Best breeding Sow, \$10
For the second best, 5 For the second best, 5
For the third best, 3 For the third best, 3
For the fourth best, 1 For the fourth best, 1

In awarding premiums on hogs, reference will not be had exclusively to size or to present condition, but to that form and that proportion of bone and flesh to more valuable parts, which promises the greatest value from the least amount of feed.

SHEEP—1. LONG WOOLLED.

For the best Buck, \$10 Best pen of 3 Ewes, \$10
For the second best, 5 For the second best, 5
For the third best, 3 For the third best, 3

2. MIDDLE WOOLLED.

For the best Buck, \$10 Best pen of 3 Ewes, \$10
For the second best, 5 For the second best, 5
For the third best, 3 For the third best, 3

3. FINE WOOLLED.

For the best Buck, \$10 Best pen of 3 Ewes, \$10
For the second best, 5 For the second best, 5
For the third best, 3 For the third best, 3

The term "long woolled" is designed to include the Leicester, Lincoln, and all the English varieties of sheep which furnish the quality of wool suitable for combing—the "middle woolled" the South Down, Norfolk, Dorset, Cheviot, native, &c.—the "fine woolled" the Spanish and Saxon varieties of the Merino and some of their crosses.

FARM IMPLEMENTS.

For the best Plough, \$30 Best Threshing Machine, \$20
For the second best, 20 For the second best, 10
For the third best, Diploma. For the third best, Diploma.
For the best Harrow, 5 For the best Horse Rake, 5
For the second best, 5 For the second best, 5
For the third best, Diploma. For the third best, Diploma.
For the best Cultivator, 5 Best Fanning Mill, 5
For the second best, 5 For the second best, 5
For the third best, Diploma. For the third best, Diploma.
For the best Drill Barrow, 5 For the best Straw Cutter, 5
For the second best, 5 For the second best, 5
For the third best, Diploma. For the third best, Diploma.

Discretionary premiums will also be awarded to manufacturers of the best sub-soil and side-hill ploughs, hoes, chovels, spades, forks, rakes, and other farming utensils.

The economy and durability, as well as the excellence, in other respects, of farming implements, will be taken into consideration.

Discretionary premiums will be awarded for the best samples and best varieties of winter and spring wheat, corn, rye, barley, oats, peas, beans, buckwheat, hemp, flax, broom corn, maple, and best root sugar, &c. &c. Also, potatoes, turnips, sugarbeets, mangel wurtzel, carrots, pumpkins, and horticultural products generally.

Also, fruits of all kinds, and flowers.
The varieties, when different from those in common use, should be properly explained, the method of culture, &c.

Prizes to be Awarded in Albany.

The following premiums will be awarded at the annual meeting of the Society, on the 3d Wednesday of January, 1842:

BUTTER AND CHEESE.

For the best sample of }
Butter, not less than } \$20
100 pounds, }
For the second best, 12
For the third best, 8
For the fourth best, 5
For the fifth best, 3

FELD CROPS.

Best acre of Wheat, \$30 Best acre of Potatoes, \$15
For the second best, Diploma. For the second best, Diploma.
Best acre of Barley, \$15 Best acre of Sugar beets, \$15
For the second best, Diploma. For the second best, Diploma.
For the best acre of Rye, \$15 Best acre of Rata bags, \$15
For the second best, Diploma. For the second best, Diploma.
For the best acre of Oats, \$15 Best acre of Carrots, \$15
For the second best, Diploma. For the second best, Diploma.
For the best acre of Indian Corn, \$15 For the best acre of Peas, \$15
For the second best, Diploma. For the second best, Diploma.

The rules and regulations which will govern the Society in awarding their Premiums, will be published in our next.

The prizes will be paid in plate or cash, at the option of the winner. Should not the Society obtain a Diploma in season, some Agricultural Work or Print, may be substituted for their Diploma.

Complementary Colors.

It has been long known that some colors when arranged together, are much more pleasing than the arrangement of other colors; or, that there are concordant and discordant colors as well as concordant and discordant sounds. The late Baron Cuvier took this notice of the subject in his "Biographical Memoir of Count Rumford."

"He determined by physical experiments, the rules that render the opposition of colors agreeable. When one looks steadily for some time at a spot of a certain color on a white ground, it appears bordered with a different color, which however is always the same with relation to that of the spot. This is what is called THE COMPLEMENTARY COLOR; and the same two colors are always complementary to each other. It is by arranging them that harmony is produced, and the eye flattered in the most agreeable manner. Count Rumford who did every thing by method, disposed according to this rule, the colors of his furniture, and the pleasing effect of the whole was remarked by all who entered his apartments."

In a recent number of the *Gardener's Chronicle*, this subject is discussed at some length, and the Essay of Chevreul (who has lately examined it with much attention) is referred to, for several particulars. In this way, the editor says, "complementary colors always suit each other. Now the complementary color of red is green; of orange, sky blue; of yellow,

violet; of indigo, orange-yellow; and consequently, blue and orange colored flowers, yellows and violets, may be placed together; while red and rose colored flowers will harmonize with their own green leaves. White suits blues and oranges, and better still reds and roses; but it tarnishes yellows and violets. In all cases however, when colors do not agree, the placing white between them, restores the effect."

To the lovers of beautiful flowers, who may wish to arrange them with the finest effect, these notices may be interesting and useful; and the following succession of colors is recommended, where the flowers are placed in *lars*; viz:

"White, reddish-scarlet, white, rose-lilac, yellow, violet or purple, orange, white, reddish-scarlet, purple tinged with green, rose-lilac, yellow, violet or purple, orange, white, red-scarlet, deep purple, rose-lilac, white, yellow, violet or purple, orange, white, &c."

"To produce the best effect in patches of seven arranged thus—

* * *
* * *
* * *

we may have 1. Six orange with a purple or violet centre. 2. Six purple or violet with a yellow centre. 3. Six yellow with a purple or violet centre. 4. Six scarlet with a white centre. 5. Six white with a scarlet centre. 6. Six rose with a white centre. 7. Six blackish green purple with an orange centre. These seven patches forming a *straight border*, may then be repeated in an inverted order which would give 13 patches; and there should be a patch of seven whites at each end. If the border is *circular*, without any central point of view, the foregoing arrangement should be repeated *ad infinitum* without varying the order after the 7th patch.

"Another advantageous disposition would be the following:

white * pink white * orange
pink, yellow, white, orange, violet, white
white * rose white * orange

violet * yellow scarlet * white
yellow, white, violet, white, yellow, scarlet
violet * yellow scarlet * white

blue-purple * white
white, pink, blue-purple
blue-purple * white."

From the Magazine of Horticulture.

The Yellows in Peach Trees.

I have noticed occasional useful remarks on the best varieties and the culture of fruit trees, in your valuable Magazine; but I have not, as yet, seen any remarks upon the disease called the *yellows*, which afflicts the peach tree, or reasons assigned for its prevalence. If the disease could be found, it might lead to a cure, which would render a lasting benefit to our country. However valuable most other fruits are, none are equal to the peach in delicious flavor and healthiness, and I should therefore be pleased to see this subject carefully investigated, and the experience of some of your intelligent correspondents communicated through your pages.

And as I have, for about thirty years, occasionally had my attention drawn to this subject, I am willing to throw in my mite of experience. I am fully satisfied that the complaint exists. Some persons say that the worm at the root is the cause of the yellows. I acknowledge that any disorder that destroys the trees will cause the leaves to turn yellow; but the complaint I call the yellows will kill a whole orchard, without any visible wound, on or before the third or fourth leaf crop. I think where any neighborhood abounds with peach orchards, it will be nearly impossible to keep clear of the disease.

On planting out young peach trees on the site of a peach nursery, two years after the nursery was removed, and although the ground was in other respects

well suited for the growth of the peach tree, yet by the next autumn, many of them were dead, and the leaves so sickly that I had them all dug up, and there was no sign of the worm at their roots. From this, and other similar experiments, I think the disease may be governed by planting in or near where a nursery is located, as that of peach trees has been, or where the latter is, consequently, where a neighborhood abounds with peach trees, there is danger of its becoming over-spread with disease, without greater care than is usually taken to prevent it.

I think I have seen evidences of its being in some degree contagious. Richard Cromwell, the respectable and worthy peach raiser, near Baltimore, has for upwards of thirty years supplied that city with peaches of the best quality, on a large scale. Some time since, when I was walking with Mr. Cromwell through his peach orchard, when the trees were hanging full of ripe fruit, he pointed out a tree he said had the yellows, having a full crop upon it, at that time worth one dollar per peck, and to me it appeared healthy; but he observed to me, "as soon as I take the fruit from the tree, I shall dig it up, in order to prevent the disease spreading any farther, for I expect the side of the adjoining trees next to it will be affected next season." I had occasion to pass through Mr. Cromwell's orchard the next fruiting time, and the sickly tree had been dug up, and, as had been predicted, parts of the four neighboring trees were evidently much affected, but only the sides next to the diseased tree, which made it the more striking, and convincing of the contagion, if this is a proper term.

On another occasion, I had a favorite early purple peach, before I had a nursery, that I suspected was partially affected by the yellows, and being desirous of preserving the variety, I cut the healthiest branch I could get, and I had twelve buds inserted in healthy peach stocks, but when they had grown about three feet, they showed the disease so plainly that in order to prevent it from spreading, I pulled up all the trees, and had them burnt.

From these cases, it seems to me the disease may be generated by planting old peach orchards or nurseries too soon after the removal of the old trees, and also by planting too near those already affected with the disease; and if cuttings or scions are taken from diseased trees, their product will be also diseased. I also think the yellows may be communicated to young trees by planting seeds taken from diseased peach trees. Respectfully yours,

ROBERT SINCLAIR.

Clairmont Nursery, March 18, 1841.

Botany.

In the whole family of sciences there is not one more instructive and pleasing than Botany. It cultivates and purifies the better feelings of our nature, by directing our minds to the goodness of God, as displayed in a very extensive portion of His works. And while it refines the taste and captivates the fancy, it enlightens the understanding and strengthens the judgment.

Cold and unkindhearted indeed must that man be, who feels no warm emotion while he beholds the bounties and smiles of an Omnipotent Creator. How then can that science fail to be interesting which treat of so important an operation in nature, as the process of vegetation, and which classifies plants and explains their properties. Whether we survey nature in the wild luxuriance of the forest, or in the modest beauties of the garden, without our most knowledge of this science, all is equally irregularity and confusion. We may admire the wildness of the ocean, or be pleased with the variety of the other, but we cannot feel that interest which even a partial acquaintance with this science will impart. All then is order, beauty and harmony. We see the steady onk of ages, and appropriate to its legitimate place in the vegetable kingdom; we scrutinize the polished petals of the flowers and glow with admiration and delight. We no longer walk in the woods, or the fields, or amuse ourselves in the garden without discovering new beauties in every shrub, and plant, and flower, which comes under our notice. The vegetable world at once becomes an empire. We read new lessons of wisdom and goodness in every blade of grass, and find that there is not a leaf nor a fibre, which does not perform its proper office in the production of the plant.

The science of Botany has already secured itself a place in almost all schools of the higher order, and only needs an introduction to be generally received and studied, in our schools of even the humblest character. It has nothing abstruse in it, but is entirely within the capacity of every grade of intellect, and may be acquired even by children. True they may not become

thoroughly versed in it, nor are they capable of fully understanding many other branches of knowledge which they study. It is a matter worthy of investigation and trial whether the introduction of its principles into our list of studies, for which all children have a great fondness, would not have a happy influence on our schools. It would be connecting pleasure with improvement, and would have a tendency to create a taste for study which should not be the least object of schools.

It would be an instructive amusement too for youth of both sexes to study this science even after leaving school. Youth is a period in which amusement will have a place in the distribution of time. This is as it should be, but that course cannot be an unwise one, which makes that amusement a source of instruction. The study of which we speak, is one where the mind of science is literally strewn with flowers. How many an hour when we spend in idle lounging, might be occupied in some pursuit, which while it recreated, would improve us. And at this season of the year nothing could be better suited to such a purpose than the study of Botany.—*Western Star.* PHILLO.

Farmers and Mechanics.

We heartily concur with the Louisville Journal in the following remarks. The *New York Mechanic* is one of the cheapest and most interesting of our exchange papers. It is published weekly at the low price of \$1.50 per year. All mechanics and most farmers, will find it worth many times the price of subscription.

"Among the many valuable papers which we receive, there are few possessing more substantial merit than the 'New York Mechanic.' It is a weekly paper published in the city of New York, by Rot's, Porter & Co., and, as its title indicates, is devoted to the diffusion of information on subjects connected with the arts and sciences—notice of the progress of mechanical and other improvements, discoveries and inventions, scientific essays, philosophical experiments and general miscellany. Each number contains plates illustrative of some new invention or improvement in machinery, with accurate and copious explanations, calculated to keep the mind of the reader well informed of the progress of the useful arts.

"The success of a paper of this kind is a cheering evidence of the increasing interest of the reading community in whatever tends to develop the talents and unfold the resources of our people, as well as of the growing intelligence and enterprise of the mechanic of the country. In times past, no class of society has been so poorly represented in the world of letters, as the mechanics and farmers. Literary periodicals are everywhere to be found—political papers have multiplied until their name is legion—even until every political party and fragment of a party has its horde of sycophants, performing its behests with a blind and heedless devotion—theology has its champions—law its advocates—medicine and surgery their defenders, and even phrenology, animal magnetism and Graham's system of sublimating the mind on brain bread and Nonion water, have secured the aid of the press, and with its thousand times multiplied voice, has heralded the merits of each all over the land, and compelled the public eye and ear to enter into its claims to attention.

"But the interests of agriculture and the mechanic arts, and the beautiful and glorious sciences in the midst of which they spring into life and usefulness, have scarcely been deemed worthy a place in the archives of the age. It has been deemed enough for the farmer to plough and reap, as his father did before him; and for the mechanic to learn his trade and pursue it in the beaten and unimproved track that his master trod—as though labor were the only means on which to rely for success and experience—interchange of opinions—diffusion of knowledge—intellectual cultivation and generous emulation, out of place or, not worth the pursuit.

"Of late however, those classes on whom the prosperity, wealth, and glory of our country so much depend, have assumed a more commanding position. A newspaper devoted to the interests of the mechanic and the cultivator of the soil, and conducted with taste, ability and effect, is now no strange thing. We see no surer mark of the progress of society than the elevation of the laborer to his proper dignity, wherein his moral power is brought into action as well as his physical strength.

"Of all the varied employments of men, there are none so well calculated to unfold the powers of

the mind and lead it on from discovery to discovery— from invention to invention, as the cultivation of the soil and the pursuit of the different branches of mechanical sciences. The mind has always a fund of fresh matter to draw upon, capable, by a thousand chances and combinations, of being improved without limit, yet without ever reaching absolute perfection. The chemical properties of soils—their adaptation to particular crops—the cultivation of the fruits of the earth, and the taming of the useful animals, afford a never ending series of instructive lessons. And the mechanic arts, how low do they now stand—how well calculated to excite the ingenuity mind in the pursuit of those improvements which, while they develop its own powers, enlarge the sphere of human industry, and surmount the domination of the intellectual over the material world."

How to Eradicate the Bramble.

I observe that a correspondent in your last number inquires how the blackberry bush may be destroyed. As I have encountered and eradicated some formidable patches, which existed on the lands which I have at different times added to my farm, I think I may venture to recommend to your correspondent an infallible prescription. Some time in the winter or spring cut them close to the ground, and repeat the operation the last of July. A few will appear the second year, be sure to cut them also the last of May, and the last of July. This specific, if based upon the scientific principle, that no tree, shrub or plant, can long maintain the life of the root without the aid of the top. The leaves, etc., are as indispensable to the top, as a vegetable, as lungs are to an animal.

The same plan will destroy the iron weed or devil-bit, which so much infests the blue grass pastures of Kentucky, and which some farmers have vainly endeavored to eradicate by cutting once a year for thirty years in succession. Such weeds are not to be exterminated by cutting in the blossom or in the moon, but by the dint of scratched heads and swathed faces.—You may have remarked the freedom of my farm from them, though scattered over here and there shows the propensity of the seed to produce them, and that my predecessors were industrious enough to raise their own blackberries.—*Western Farmer and Gardener.*

Consumption of Meat.

There are few things in the habits of Americans, which strike the foreign observer with more force, than the extravagant consumption of food—and more especially of meat. Truly we are a carnivorous people. With all our outcry about hard times, the quantity of provisions consumed in America would support, in health, treble our population in Europe. The vast consumption of meat is not only wasteful, but injurious to health, and to activity, of body and mind. The only if made of iron, would be unable to perform all the functions imposed upon it at one time—especially is it, we should suppose, without pretending to any science on the subject, deleterious to eat meat; suppers—or to eat a heavy meal immediately preceding any action of body and mind. How well this is proved by the experience of the turf. Suppose a race to be made for a heavy sum, half forfeit, and on going into the stable, the trainer finds that although he is sure that his nag is the better horse, the groom has been bribed to give him a gallon of oats and water at pleasure, would he not at once withdraw, and pay forfeit sooner than encounter the uncertainty of paying the full amount? May it not be averred that one half of the provisions consumed in this country might be saved with certainty of avoiding the numerous diseases that arise from indigestion, impaired digestion, and disordered blood? Let the heads of our families examine, and they will find that a substitution of bread and vegetables and milk for three-fourths of the meat consumed, would be attended with economy and better health.—*American Farmer.*

Recipe for Making French Honey.

Take six eggs, leaving out two whites, one pound of loaf sugar, a quarter of pound of butter, the juice of four lemons, and the rind of two grated; the sugar to be broken into small pieces, and the whole stewed over a slow fire until it becomes of the consistency of honey. It is very nice. A SUBSCRIBER.

Montgomery co., Pa., May, 1841.

ADVERT.

A person renders me services, and I write a letter of thanks, acknowledging the obligation. Who ought to pay the postage? Q.



ROCHESTER, JULY, 1841.

Our Aim and Expectations.

When the New Genesee Farmer was commenced, the publishers announced that they should aim to make it the most useful and most extensively circulated agricultural paper in the country; and, although some may have thought this avowed a little of egotism, we are willing to repeat the assertion, and do so with an assurance of success immediately in prospect. It is unnecessary to mention here what our friends say respecting our labors thus far: we only wish at present, to inform our readers that such arrangements are now making as we have the utmost confidence will fully accomplish the objects named. Our circulation is now double what it was last year, and we have good reason to believe that next year it will be double what it is this; or in other words, that we shall print and circulate about 40,000 copies per month! Does any one say "it can't be done?" We reply, *the word can't is not in our vocabulary*, and we expect, next month to make all this appear reasonable.

One word in the ears of our readers. ¶ Please tell your friends and neighbors that we have now a supply of Vol. I and Vol. II. from the commence ment, but this will not be the case many months, and some will repeat it if they do not subscribe soon. We have no time for stereotyping or reprinting back numbers. PUBLISHERS.

"Downing's Landscape Gardening.
Adapted to North America, with a view to the Improvement of Country Residences, and with remarks on Rural Architecture."

It is with no little satisfaction that we announce to our readers the appearance of the above work, from the pen of our gifted friend, A. J. DOWNING, of Newburgh.

We have had opportunity but for a hasty glance at its contents; and wish our readers could have shared our enjoyment, and we may add, pride, as we looked over this truly elegant volume. The engravings are very creditable to our artists, and the quality of the paper, and the mechanical execution generally, leave nothing to be desired.

The arrangement appears to us very simple and judicious, and so far as we have examined, his subject is treated in such a manner as to show a just conception of the wants and means of this, as distinguished from European countries. His motto is,

"Insult not Nature with absurd expense,
Nor spoil her simple charms by vain pretence.
Weigh well the subject, he with caution hold,
Profuse of genius, not profuse of gold."

But we must defer further notice until our next number, which we design to enrich with extracts from the work.

Acknowledgments.

Our sincere thanks are due to Mr. Charles Downing, of Newburgh, for a copy of his brother's beautiful work on Landscape Gardening, and a copy of Lindley's Theory of Horticulture, republished, with notes by Dr. Gray and A. J. Downing. More about these hereafter.

We are also indebted to Hon. H. L. Ellsworth, for several packages of seeds.

To Mr. James Greay, of Kent, England, for an interesting letter received some time since, and the annual report of the Nonington Farmer's Club.

To some kind friends in London, for valuable English books and papers.

To Thomas Allcock, one of the editors of the Western Farmer and Gardener, Cincinnati, for a copy of "Bee-breeding in the West," a small manual, intended as an accompaniment to the "Subsoiled Bee-hive," well calculated to increase the *secrets* of rural life.

To J. D. Bemis, Canandaigua, for several interesting papers, among them a catalogue of teachers and pupils of the Ontario Female Seminary, an institution which we are happy to know *deserves*, as well as receives, the liberal patronage of the community.

Scarcity of Fodder—Seasonable Hints.

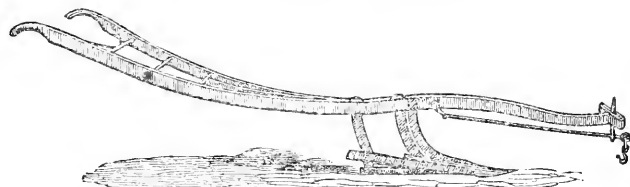
Farmers who "work it tight," will of course take measures to provide sufficient food for their live stock the coming winter, and endeavor, as far as possible, to make up for the deficiency of hay and the failure of some other crops. It is not yet too late to sow millets—it produces both grain and fodder. Corn may also

be sown now, broad cast like oats, and will afford an abundance of the best of fodder. ¶ See remarks on these subjects in another part of this paper.

Those who have not sown any root crops, or have lost them, should now sow turn bags—just in time—and if they fail, sow English turnips about the middle or latter part of the month. Much time has been lost this season by the farmers and their crops, and both must now exert themselves to the utmost, or winter will find them unprepared. We advise our readers, therefore, to bestir themselves, and keep stirring, and above all to stir the ground often among their corn and other cultivated crops.

Sales of Berkshire.

Mr. Lossing of this city, informs us, that he has recently sold his famous breeding sow *Mazima*, to Mr. Carr of Kentucky, for the handsome sum of \$500. The animal is well known to breeders of Berkshire, as one of the largest of her kind in this county. Mr. Lossing has also sold his imported boar *Norberry*, to the same gentleman, for \$200. He was shipped a few days since, and weighed, including cage, 850 lbs. —*Albany Collector.*



THE DEANSTON (SCOTCH) SUBSOIL PLOUGH.

The Subsoil Plough, we believe, is destined to effect a greater improvement in American agriculture than any other implement that has been invented or introduced of late years. We published last month, the remarks of Mr. Phinney on subsoil ploughing; and we now copy from the Farmers' Cabinet some additional observations on the subject, together with a representation of the Scotch Subsoil Plough. We have seen these implements, both in Scotland and England. Those in the latter country were mostly of a better and more wisely construction than the former; and we have no doubt but that a still better and cheaper article for the purpose will soon be manufactured in this country. We intend to give representations of several models, in hopes to call forth the *ingenuity, constructiveness and enterprise* of some of our readers.

The Deanston Plough.

"The plough from whence the above drawing has been made, was brought to this country and deposited in the Franklin Institute by the late James Ronaldson, Esq. It is a gigantic implement, measuring 12 feet 6 inches in length, constructed throughout of wrought iron, weighing upwards of 200 lbs., and capable of rooting up stones of two hundred pounds weight; it is intended for a team of 4 or 6, or even eight horses or oxen, when it might be let down to the depth of the beam. But much of the soil of our country would be effectually worked with an instrument of far less magnitude, constructed chiefly of wood and properly armed, the *side or share*, it being, being of cast iron, the length of the handles being in proportion to the weight of the plough to be raised by means of its *terrace*."

"Sub-ol ploughing has formed in Europe—as it is destined to do in this and every other country—a new era in agriculture; it is applicable to all soils, and even in the most sandy will be found of superlative importance, preventing the disease called the *stud* in wheat, which is supposed to arise from a superabundance of moisture which cannot pass away, by reason of some impervious substratum, until it has chilled and denuded the roots of the plants and brought on a mortification of their sap-vessels: the disease is in some parts known as the *stunts* or *stanch*. It is understood that the subsoil plough does not turn the furrow—it passes along the open furrow made by the common plough, rooting up the bottom to any depth it might be put to, thus leaving it surred and pulverized, to form a bed of loosened soil, into which the lower or tap roots of the plants might penetrate, when they will easily find moisture in seasons of the great drought, and from whence it is *pumped* up by them, for the supply of the lateral roots, which are destined to seek food in the upper stratum of the earth. This subsoil plough will be found, in many cases, to take the place of under-draining, especially if on plough-

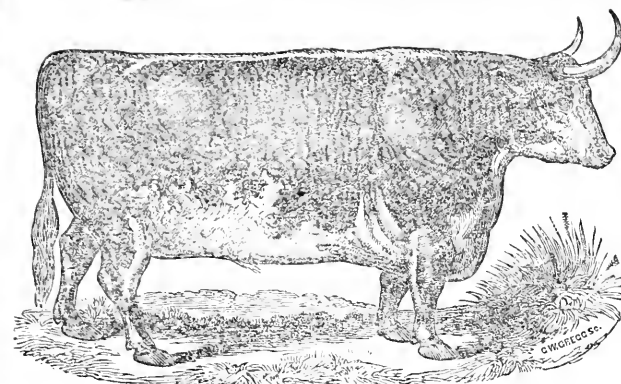
ing, the land can be laid to give a *gradual fall throughout its whole length*—a matter of the highest importance in the cultivation of every soil."

From the New England Farmer Subsoil Plough.

On Thursday last, we spent the afternoon in holding the plough. The work was on land which has been long pastured. The surface mossy, the sward tender, the soil light. The subsoil partly a loose and fine gravel and partly a yellow loam. With two yoke of oxen we ploughed one half an acre with Howard's plough E. 3, to the depth of 7 inches, and subsoiled with Howard's subsoil plough about 7 inches. We found that 10 inches of subsoiling, with which we commenced, would worry the team. The stirring of the earth to the depth of 12 or 14 inches, we thought that might be an improvement upon shallow ploughing. And where it can be done as cheaply as in this instance, the experiment is not costly. But our case must not be taken as a fair instance of dispatch, for the furrows were 40 rods long upon a plain, and the ploughs were changed only 14 times in the half day. Ordinarily, where it is a day's work to break up an acre, it will take more than two days to break up and sub-soil the same. In a few spots where the subsoil was slightly rocky, the subsoil plough appeared to be moved more easily by the team than any where else.

The extent to which the earth was stirred by this new implement, surprised us. The seven inch furrow was scarcely three inches deep after this plough had been passed under it.

We have strong faith that this instrument will come into extensive use. It is true that no great reliance should be placed upon theories until confirmed by experiment; and we are not inclined to devote much space to the praise of this implement the present season; but should our anticipations be fulfilled we hope to be permitted to urge its use another year.



THE HEREFORD OX.

correct representations of distinct breeds of cattle, are more useful to farmers than portraits of living animals which do not serve the purpose of illustration. The Hereford is one of its oldest and most celebrated breeds, and one which particularly interests the American farmer, owing to its entering so largely into the composition of our common mixed breed.

The above portrait, which we find in the Farmers' Cabinet, (copied, we presume, from Low's illustrations,) exhibits the true form and characteristics of the Hereford Ox in perfection.

Mr. MARSHALL's description of this famous breed of cattle, is as follows:

The countenance, pleasant and open; the forehead broad; eye, full and lively; horns, bright, tapering, spreading; chest, deep; bosom, broad and projecting forwards; shoulder bone, thin, flat, and no way tubercular in bone, but full and mellow in flesh; loin, broad; hips, wide and level with the spine; quarters, full and wide; rump, even with the general level of the back; tail, slender; barrel, roomy, with ease throughout deep and well spread; ribs, broad and standing close and flat on the outer surface, giving a smooth, even barrel, the loins set large, and of full length; round bone, small and snug, and prominent; thigh, clean and regularly tapering; legs, upright and short, with bone below the knee small, light, large; twist, round and full; flesh, everywhere, mellow, soft, and yielding pleasantly to the touch, especially on the chine, shank, and ribs; hide, mellow and supple; coat, neatly haired, bright and silky; color, middle red, with bald face.

The breeders of these cattle would do well to preserve the old blood in as great a state of purity as possible, for they possess one of the most valuable breeds of cattle in the world. The distinguishing qualities of the Hereford Ox are, the great produce of beef, quick feeding in proportion to their growth and size, with immense strength and speed in labor. With respect to the most profitable return in quantity of beef, it may be assumed that no breed in England can stand in competition with them, and they have accordingly been most successful at the annual prize cattle sales, commanding the first prize, alive or dead. A writer observes: This breed, so celebrated for producing quantity of beef, seems to combine all other desirable qualities—length, depth, substance, roundity, fineness, yet sufficient of bone. Their origin is supposed to have been raised by the old Hereford and the Northern breed; and this opinion is strengthened by the remarks of a Herefordshire breeder, who says, about 20 years ago, to Mr. Gallier, of the Grange, procured a bull from Yorkshire with a white face, and wide horns, and bred from him; the produce became fashionable, and actually the foundation of the present famous breed—and hence the bald face of the Herefords, a breed which, joining beef and labor, stand on the summit; they fatten speedily at an early age, and will live and grow where others would scarcely subsist. It is however, universally admitted, that as in fleeces they are inferior to the Downs and many other breeds, while compared with these, they are shorter in the leg, higher and paler and heavier in the chine, rounder and wider across the hips, and better covered with fat; the thigh leaner and more muscular, and the shoulders larger and coarser.

The weight of Mr. Westcar's Herefordshire prize Ox, 2132 lbs. the four quarters.

THE NEW ENGLAND FARMER.—We mentioned some months since, that ALLEN PATMAN had assumed the editorship of this old and respectable paper; but he had failed reaching us for some weeks previous, we could not speak of the effects of the change. Since, however, it has arrived regularly, and we ought before now to have stated that Mr. Patman's administration has, in our opinion, wrought a decided improvement in its character. The following article on Haymaking is a fair specimen of the genuine farmer style of Mr. P. We thank him for saving us the trouble of writing an article on that subject for our readers.

Hay Making.

Scythes.—Procure a good scythe for every man and boy on the farm, who is to do any thing at mowing. This work of cutting the grass is hard enough, with the best implement that can be made. And where the tool is poor, the work must be done either poorly or slowly; and in either case the farmer is losing more than the cost of furnishing a better instrument. We know not (by the way, this term *scythe*, I am tired of, and shall, when it so pleases me, use the more proper representation of your single self, *D*—I know not that any one of the manufacturers of this article excels all others; some scythes from each factory are good, and others are not so;—if you are unfortunate enough to

get a poor one, there is no economy in trying to work through the season with it, gnawing off your grass; wasting every five minutes; fretting your own body or that of your hired man; going to the grindstone every two hours;—these attendants upon a poor scythe are such consumers of time, that it is better to throw the soft or the brittle thing aside at once, and purchase another. As a general rule the scythe that crooks towards the point works better than the straight one—at least it is so in my hands. The cast off scythe should not be put into the hands of the boy who is learning to mow—he wants in his feeble and unpracticed hand, a sharper edge than is required by the adult. Give him a good and a light tool, or else excuse him from this work.

Horse Rake.—The value of this implement for use on a farm of common inequalities of surface, and of common size, is often over-estimated in the advertisements and puff. But the actual worth of it justifies its purchase. We have used the revolving horse rake for four or five seasons, on a farm where two acres is perhaps the amount mowed per day: the raking up of the thick green morning's mowing in the latter part of the afternoon, is a fatiguing appendage to the previous hard work of the day. The old horse who has been in the pasture all day, and has nothing to do at present but kick flies, can greatly lighten and considerably shorten this labor; we generally save in time probably from 15 to 60 minutes, and in strength more than

half. This saving towards the close of the day, comes in very opportunely, and we would not part with the rake for twice its cost.

To manage this instrument skillfully, requires some practice—but as soon as one gets a little accustomed to it, he can try the winnows very well. On breeze farms its use must be more valuable than on small ones. Where grain is mowed and raked up, the rake is very convenient and comfortable; it takes all chaff, and saves from hard land raking.

This instrument deserves more extensive use than it has found hitherto.

Time of Cutting.—Where grasses are not lodged, it is well to cut when they are fairly and fully in blossom; but to avoid having some of them get far past this state before time can be found for securing, it is prudent to begin upon the more luxuriant fields before they reach full blossom.

Curing.—In the early part of the hay-making season, while the grass is quite green, and much time is required for curing, it is well to be busy in turning it up to wind and sun; help it along as fast as you can; but later in the season, if the weather be good, it will be sufficiently cured the day after mowing without much assistance.

Some little matters amount to considerable in the course of the season. In turning up hay, take the help of the wind; do this too in raking;—in raking after the cart, regard the course of the wind and the direction in which the team will next move, and so arrange as not to be obliged to take the ground over twice. In this simple labor of taking after the cart, I have found "head work" as profitable as in any of the operations upon the farm.

Salt.—Hay that would be liable to heat and sour because not quite cured, may often be mowed away with safety, if 8 x to ten quarts of salt to the ton are applied. The use of salt upon nearly all the hay as it goes into the barn may be wise. I am inclined to the belief that a farm in my neighborhood on which salt has been very freely used in that way, had been greatly improved by it; that is, I think the manure has been much more efficacious in consequence of the salt applied to the hay. At home we find no hay so palatable to the stock as that which is cut young, three-fourths dried and well salted.

Clover.—This should be cured without much exposure to the sun. I can tell a story that goes to show that clover need not be so thoroughly dried as many suppose. Last year, about the middle of June, we mowed some very coarse clover, scarcely beginning to blossom, and as full of sap as clover ever gets. The weather was cloudy and foggy for several days, so that but little progress was made in curing it; it continued heavy and green; after four or five days, and while the crows were damp with fog we loaded it, because the indications of rain were strong. It was taken to the barn, stowed away, and very thoroughly salted. In four or five days it was dripping wet and burning hot; in fifteen days it was mouldy; in two weeks it was the hay ordered above all others in the barn by "old B & Horn," a dairy cow that was destined for the slaughter; every animal in the barn would devour it greedily—and this too, when most of the hay, and all the corn stalks in the barn had been salted—the salt taste was no rarity.

Drinks.—The hay-maker must have a full supply of drink; perspiration will be free, and he must have something to support it. There is no danger from frequent drinking in the hottest weather. Take cold water as often and as freely as you please; there is no danger from it, if you have not been too long without drink. Cold water is the best of all drinks for slacking thirst—it may be sweetened with molasses or sugar; and if milk is taken with them, the drink is the most serviceable we have ever found—furnishing nourishment while it slakes thirst. Rum and Cider, and their kindred spirits, are not to be admitted to the field of the prudent and worthy farmer. I know they are not needed; I know they are not useful there. The hay will be cut and cured with more despatch and comfort, when true temperance prevails, than where alcohol intrudes.

None but the intemperate are injured by drinking cold water. It told that I know not the hardship of swinging the scythe, and the need a man then has for the stimulus, I reply that I do know what it is to swing the scythe, and that on the very hottest day of 1840, I was mowing from half past four in the morning all three in the afternoon, with the exception of two enough to eat, drink and grind the scythe; and neither then nor on any other day of the season, did I require the use of any other drinks stronger than milk and water. And no man, after one month of temperance, will ever require any thing stronger.

Asparagus.

An observant neighbor proposed to us, the other day, to recommend planting asparagus in a single row, each plant two feet apart. In beds, the plants crowd each other; and as if surrounded by weeds, send up more slender stems. These remarks agreed entirely with our own observations; for though we have been at the expense of making deep beds of the best materials, our finest asparagus grows in common soil where the seed was accidentally dropped. In beds it is difficult to remove each seedling as spring up, without injuring the roots of the older plants; but from a row this may be easily done; and all plants that intrude on them should be treated as weeds.

To raise the plants: Separate the seeds from the berries, and sow them in a bed late in the fall (not in the spring) covering them with fine earth half an inch deep. If put in rows, so that the hoe can pass between them the next season, they may be kept clear of weeds more conveniently; and when one year old, if they have had plenty of room, they may be transplanted. One long row may be the best. And be careful that not more than one plant is set in a place.

The cropping that asparagus endures, is a very severe; and it seems reasonable that the plants should be strengthened by the growth of three years before they are molested. To cover the stools in the fall with stable manure, and to rake off the outer parts in the spring, is an old and excellent practice. It protects them from the frost of winter and manures them at the same time. Strewing salt over them liberally in the spring, also adds to their vigor.

In a few years, an asparagus plant, neither crowded on by others nor over-cropped, will form a stool from twelve to eighteen inches across.

Disease of Silk Worms.

The subject of Silk culture is assuming a degree of importance, which, in our opinion, justifies us in devoting to it considerable space. The passage of the law giving a bounty on Silk and Cocoons this State, will induce many to engage in the business who have not done so heretofore; and we shall endeavor to impart as much information on the subject as appears to us important and is consistent with justice to the majority of our readers.

The following article is from the April No. of the Journal of the American Silk Society, a monthly publication by Cullen B. Smith, Baltimore, which ought to be taken by every person engaged in the Silk business. Price, \$2 per year.

IMPORTANT TO SILK GROWERS—THE MUSCARDINE IN AMERICA.

Probably the most important information it has ever fallen to the lot of the editor of the Silk Journal to communicate to the public, on the subject of Silk culture in this country, will be found in the present article.

It has long been known to every reader of publications on silk culture, that by the ravages of a disease called *muscardine* in Europe, the average loss of worms, taking one year with another, amounted to 45 to 50 per cent. of all that were hatched, and that two, after the greater portion of the expense of rearing had been incurred. This evil has been continued from time beyond the reach of history, till within a year or two past. In the United States all of us have heretofore considered our worms exempt from this fatal disease; as it has generally been supposed that it did not exist here at all. This was a false delusion. We have just received from France a copy of the "Annales de la Société Sericicole, fondée en 1836, pour l'amélioration et la propagation de l'industrie de la Soie en France," for 1877, 1878 and 1879, in one of the volumes of which we find a most excellent plate representing silk worms in the various stages of the muscardine, the first glimpse at which showed us that it was the identical disease of which a great portion of the silk worms in this country have perished. All who saw the disease last year and have even this plate,

identify the disease instantly. We shall endeavor to have translations made for our next number, descriptive of the disease, and if possible—if we can get the means—publish the plate also. In the meantime, however, we have thought it advisable to take this hasty notice of the fact, that all silk growers may be enabled to apply the remedy. Happily the remedy will do no harm, whether the worms are affected with the muscardine or not; nor will it injure the worms even if they are perfectly healthy; or if they have other diseases. The remedy is the free application of air-slacked lime to the worms, and also over the floors of the cocoonery, and white washing all the wood-work of the fixtures. The lime should be sifted through a fine sieve on the worms two or three times a week if healthy, and once a day if diseased, in the morning before the first feeding, and always after cleaning the hurdles. The quantity of lime to be sifted on the worms may be just sufficient to whiten the worms and leaves well. This remedy has during the two past years enabled those persons in France who have used it, to save and obtain cocoons from 57 per cent. of all the worms hatched.

Now that we know the disease that has done us so much injury, and also know the remedy, the latter should be applied; and as there are very few, if any, who yet know the disease by sight, we would most earnestly recommend that the remedy be applied in all cases, whether the worms be sickly or not, as a preventive, for it is even more effectual as a preventive, than as a remedy, and, as before stated, will do no harm to either healthy worms or those affected with other diseases. It must be borne in mind that this is a contagious disease, and if but a single worm be infected by it, the disease speedily spreads to the others, until all or a large portion of the eggs be destroyed. The French have discovered that the disease consists of a fungus growth, something like mildew, or mould on cheese, scarcely discernible to the naked eye, but perfectly developed by the microscope. The fungus is propagated with great rapidity—so much so that from the small speck on a single worm it will spread over a whole cocoonery in a very few days. It generally attacks the worms after a fourth moulting, and when not arrested, carries off the greater portion of them. Sprinkling the worms with slaked lime, however, effectually prevents the disease, and will cure all the worms in which it has not made too great an impression.

We have already been asked how this discovery corresponds with our New Theory, in relation to rearing, the hatching of the eggs, and anticipate further questioning on that point. In our opinion, it is perfectly consistent with the principles advocated by the New Theory. Retarding the hatching of the eggs beyond the natural period, the New Theory says, weakens the constitution of the young worms, and predisposes them to disease. The present discovery points out the particular disease thus induced, or at least, one of them, and that the most formidable. Let the eggs be hatched at the natural period, that is about the time in 1841 that their parents were hatched in 1840, and then the constitution of the worms will not be debilitated or vitiated by the unnatural process of retarding. By this means we shall under the young ones into the world with good sound constitutions, subject to no other disease than those they may contract from contagion or bad treatment. By this discovery, therefore, we have only found out the name and nature, and means of prevention and cure of a disease we have all along had amongst us. It must not be considered in the light of a new calamity that threatens us; but rather a discovery of the means of averting one that already afflicts us. It is fortunate that this invaluable information has reached us at this particular moment—just in time to be of immense service to us in this our day of need.

It must not be supposed that the above remedy is alone to be depended upon, that the application of lime above directed, and for the purpose specified, will authorize the omission of the usual precautions and attention to cleanliness, ventilation, &c. On the contrary, the strictest attention to cleaning the hurdles, removing rubbish, purifying the air by the sun, &c. must be observed at all times. Every worm found on the hurdles in a sickly condition or dead, should be immediately removed. We have nevertheless a very valuable result from a sickly worm, and would therefore recommend that all such be removed to a distance and destroyed. Some of the French silk growers have hospitals for the reception of such *invalids* as afford any hope of recovery; but we think it is better economy to get rid of them at once.

We learn occasionally of fixtures being contrived for rearing the worms upon, that save the trouble of clean-

ing the hurdles. We have ourselves years ago used such a plan, and with success too. But the danger in all such, which must not be overlooked, is disease, even among the worms, the sick are apt to be conceded by the accumulation of filth and bran and dying in their confinement, the first notice we have of the existence of disease to any considerable extent, will be the offensive odour evolved by the worms; and very probably a rapid spread of contagion among the healthy worms. In feeding with leaves, therefore, we should clear the hurdles just as often and as necessarily, as when feeding with picked leaves.

* That no one may be misled by the remarks in article on the muscardine and its preventive by use of lime, it seems necessary to say, that several other diseases affect silk worms, and many worms destroyed last summer by other diseases. It must therefore, be taken for granted that the application of lime is to prevent and cure every disease, though believe it will act as a preventive of most of it when accompanied by other necessary and prudent treatment. If from any cause the worms have a stunted and sickly constitution, they will be liable to various diseases, and the proper preventives will be these, viz: cleanliness, thorough ventilation, the use of lime, &c. We most truly believe that the disappearance of all the diseases of silk worms this summer, was the retarding of the hatching of the eggs.

The worms were weakly in consequence of it, therefore more liable to be affected by the various existing causes of disease, than they would have been if they possessed robust constitutions. We believe the muscardine may be, and probably is, generated by this very process in this country. The French say it is caused by a fungus growth, which is a vegetable of an inferior order, and produces its own seeds. The inference then is that it cannot produce in the absence of its seed. But we know that the mould of bread, cheese, &c. is also of the inferior order of vegetable growth, and that it is produced in the same manner when the temperature of the weather is favorable to it, and hence we infer, not that it is a spontaneous production, but that it is *always* prevented substances in which the growth is found to be prevented from growing by the non-concurrence of circumstances necessary to their growth. Time, temperature and moisture, are the circumstances that are generally required to concur in the production of mould, mildew, &c. Take away either, and neither mould nor mildew will be produced.

One remark more seems appropriate here. Climate is unquestionably more favorable for silk worms than that of any part of Europe; and it is particularly so in regard to the muscardine. The extreme dryness of our atmosphere, compared with that of a part of Europe, is notorious; and it was this fact that induced the universal belief that the muscardine did not prevail here. But although our atmosphere comparatively dry, the air in our cellars and ice-houses and cocoons is not always so. The keeping eggs in damp cellars and ice-houses, wherein they become mouldy or mildewed, and especially when kept there for a long time and beyond the natural time for hatching, may very well be considered capable of developing the fungus growth constituting the disease called muscardine; and unless we take care to avoid such, it will be in vain to expect our climate to protect us against the consequences.

G. B. S.

Living Bees.

I have practiced two methods of securing the swarms of bees when they leave the old hive, such which I think preferable to the old fashioned way rattling all the old tin pans and sleigh bells in the neighborhood, until the swarm settles, and then brush the topsy-turvy into the hive. My first method is this: as the season for swarming approaches, I cut an eve green, such as fir or spruce, about six or eight feet high, and trim off all the branches on one side close to the tree so that it may be laid flat on the ground the lower end, or butt, is slung like a snake at one end in a hole made by an iron bar in the ground about ten or fifteen feet in front of the hives. Swarms will very seldom seek any other resting place, when about like the above is at hand. When a swarm leaves the hive I say nothing, but stand and look on until the bees settle and quiet on the bush. I then carefully raise the bush from the hole, and lay it flat on the ground, and place the hive over them. If the first on the upper side interfere, I press the hive down on a stone or some heavy substance on to keep it in its proper place, till the swarm takes possession which is generally in ten or fifteen minutes. In this way I have never lost a swarm, and have frequent

ing a swarm and removed them to the bee house at the old hive in one hour from the time of their being the hive.

My other way is as simple, and as far as I have fully, equally sure. I take a board, wide enough to have on it two or three feet long, bore a hole in the centre, and drive in a pin, one or two inches in diameter, and eight or ten inches long; I then two small cords and fasten the end of each to the ends of the board so that they form a loop at each end of the board about two or three feet long; this I then prepared I suspended from two stakes in one of the hives, with the pin pointing downwards, so that the stakes slope towards each other so the board may not touch at the end, around this the bees will cluster, and when they get still, under the cord from the stakes, turn the board over, this will lay it on the ground and set the hive over it, this will much time and trouble may be saved, or it is no need of watching for swarms, only produce resting places, and there you will find them. We left a swarm suspended under the board as fast as it was, though the day and found them safe in evening, and hived them after the other labor of day was past. I think on the whole this method best, as they seem more contented under cover than when more exposed, and not so likely to take wing before they are hived.—*Mechanic and Farmer.*

J. R. M.

Circular.

to the Agriculturists, Manufacturers, Mechanics and Artisans of the United States.

The American Institute of the city of New York directed us, the Trustees, to announce to the public, that the Fourteenth Annual Fair will be held in a city, in the early part of October next. The time and place, with a variety of details, will be made known and published by the Managers as soon as convenient, after their organization shall be perfected. This Institute was established and incorporated by the Legislature of the State of New York, to promote domestic industry and improvements in the United States. Among the means suggested in its charter, are public exhibitions of meritorious productions, and rewards for such as are most deserving. Thirteen Great Annual Fairs have already been held. Their beneficial effects in exciting emulation have been seen and directly felt in more than half the States of the Union.

The popularity of these exhibitions, the extended intense competition they have excited, is without precedent. More than one hundred thousand visitors have been admitted, and more than fifteen thousand specimens of domestic products have been exhibited at a single anniversary.

A Repository for the daily exhibition of improvements, and a Library, of great utility for practical purposes, have both been established by this Institute, and have been open for years free of expense to contributors and visitors. Five ploughing exhibitions have been held on fields in the vicinity of New York; and many eloquent addresses, instructive lectures, and public reports, have been made on different occasions, all having a bearing on productive industry.

The amount of gratuitous labor bestowed by the conductors of this Institute in fourteen years, it is believed, is without a parallel in the history of our public institutions. Hitherto the Institute has been sustained by voluntary contributions, unaided by city or State bounties. Impressed with these ideas, the Legislature, in a law just passed, intended for the promotion of "Agriculture and Household Manufactures," have wisely included the American Institute, and on certain conditions appropriated to it nine hundred and fifty dollars per annum for five years, requiring premiums to be awarded as suitable means for accomplishing the objects of the enactment. In addition to the pecuniary aid contemplated by this act, which is timely, and will enable us to extend our premiums, it is a public testimonial of the high consideration maintained by the Institute in the opinion of our Legislature. The confidence reposed in the Institute is in the highest degree honorable to its conductors, making it thereby the direct agent to carry into effect a law important in its future effects, and expressly enacted to encourage the great and paramount interest of agriculture, which supplies not only the principal materials on which all other labor is employed, but also affords sustenance to the whole human race.

Accommodations will be provided at the Fourteenth Fair for the exhibition of every kind of Agricultural and horticultural productions, for machines and implements, and steam power and engines. Separate and

suitable places will be assigned for exhibiting cattle, horses, sheep, swine and other farming stock. The best productions of the cotton, wool and the workshop, including woven, cotton, silk and linen fabrics, will have their appropriate rooms. Labor-saving machinery will not only be examined by competent judges, but also tested by steam power. All new and useful labor-saving inventions will command attention, and publicity given to their merits. Purchasers will have the best possible opportunity to examine, compare, and select such articles as they may wish. Gold and silver medals, silver cups, diplomas, as well as rewards in money, will be bestowed on those most deserving. The appropriation will enable the managers more liberally than heretofore, to reward industry generally, and more particularly female industry, for ingenious fabrics of household manufactory.

On behalf of the Institute, we would earnestly invoke the patronage and exertions of prosperous and intelligent agriculturists, to enable us to fulfill the expectations of the Legislature. In its wisdom it has laid the foundation of great and lasting good to the State. But much of the success and popularity of the law to encourage agriculture will depend on the efficient location of its position in the city of New York is of all others the most favorable. There will always be in this great commonwealth brave spirits, and such as know well the inestimable value of agriculture, and who are able and willing to aid any and all great and beneficial objects. The whole island is surrounded with fertile and highly cultivated farms and gardens, extending into the interior, which bring their supplies daily to our numerous markets, to meet the vast demands of city consumption. A large proportion of all the farming and gardening implements used in this and the adjoining States is supplied from this city; and with the facilities of conveyance by horses and by steam, by land and by water, it would seem to be the chosen place for agriculture and horticulture to present their fairest and best contributions, and the radiating point from which the knowledge of improvements may be readily made to flow to every portion of our country.

In conclusion we would also respectfully appeal to all the multiplied interests of industry and art to make their contributions of the best specimens, that the miniature view may be presented of the skill, the genius, and the ample resources of our country at the coming anniversary and to the public at large, whose countenance and cheering approbation has uniformly attended all our undertakings for more than thirteen years, and to whose favor this Institute owes its existence, we appeal with an unqualified confidence, and, at the same time, with a strong desire for the special and best influences of our fellow citizens, at this time, to enable us triumphantly to carry out the coming exhibition, and discharge the obligation conferred by the recent legislative grant. By the kind aid which the public can confer, and with the means provided, a new impulse may be given to agricultural improvements, and to invention and the arts, over our whole State; other States, some of which are behind, will thereby be induced to profit by our example, and thus the benign influence of liberal legislation will be exemplified in every section of our wide spread country.

Repository of the American Institute,

New York, May, 1841.

JAMES TALLMAGE,
ABRAHAM CROSSLER,
WILLIAM IGLES,
JOHN TRAVIS,
ALEX. J. HAMILTON,
T. B. WAKEMAN,
JOSEPH TITCOMB.

Trustees.

For the New Genesee Farmer.

Fence Posts Heaving by Frost.

GENTLEMEN—Can you inform me how posts should be placed in the ground so as to prevent their heaving by the frost? My land is clayey, and a good fence in the fall becomes a poor one by the next spring. Should the holes be very deep and closely filled up, or left loose at the top? H.

Utica, June, 1841.

Posts set in clayey ground, if surrounded by the soil removed in digging the hole, will be thrown upwards by frost, in spite of any precaution we know of. But where they are put in a gravelly and not tenacious soil, they rarely, if ever, heave in winter. Nor do they in a clayey soil, if the holes about them

are filled with small or broken stone closely beaten in. Possibly other materials would accomplish the same end, though we have no experience on the subject. Deep and firm setting, is of course necessary.

Fat Cattle.

Since taking charge of the Keystone we have observed a very large number of fat cattle passing our office daily for the eastern market, and have made inquiries as to the probable number. Through the politeness of Mr. Kuhns, the toll collector at the Western end of the Harrisburg bridge, we have ascertained that from the 15th of April to the 17th of June, there have passed over said bridge, eastward, seven thousand eight hundred and fifteen head of fat cattle. As to this hundred which were enabled to ford the river yesterday and to day, and there have passed through Harrisburg for the eastern market, *eight thousand one hundred and fifteen head of cattle.* These cattle, we understand, will bring upon an average \$255 per head, making them, in the aggregate, worth \$1,419,325.—*Keystone.*

Proper Season for Cutting Grain.

It is a good practice to cut every kind of grain *rather before it is fully ripe in the grain or the straw.* In a fine season, some farmers cut their crops when they find the neck of the straw immediately under the ear, free of juice when twisted round between the finger and thumb, and do not wait until the lower part of the stems are dry and yellow, because they find in such a season the straw to droop from the ear downwards. In a bad season, on the other hand, the lower part of the stem first becomes yellow and dry; after which, of course, the crop is not allowed to stand, for in such a season the ear never becomes mature, having less absorptive power, whilst the vitality of the root is early destroyed by the combined effects of bad weather and an ungenial state of the soil.—*Quarterly Journal of Agriculture.*

From the Farmers' Cabinet.

Application of Lime to Soils. Read before the Philadelphia Society for Promoting Agriculture, April 7, 1841.

Lime has long been regarded by farmers in certain sections of our country, and cultivating districts, as a most valuable agent. Stiff and tenacious soils are greatly benefited by its application, as is admitted by all who cultivate them. Whether the various chemical influences which have been assigned to its presence, are really those which constitute its virtue, I shall not inquire in this essay; I propose merely to submit some views that have occurred to me, which the plain practical farmer can fully appreciate, without the aid of chemistry or science, or their technicalities.

Clay and red shell soils are compact and tenacious, and are therefore greatly benefited by an admixture of lime, as they are rendered more mellow or friable by its application; the color of the soil is also changed to a dark brown, and has a rich oily appearance. These combined influences give it a greater capacity for imbibing heat from the action of the sun, and this additional heat communicates an increased vegetative power; besides, the improved friability or mellowness of the soil gives greater facilities to the fibrous roots of plants to shoot further into it, and hence they obtain a larger supply of nourishment or food. Its capacity for absorbing moisture is also greatly increased, because, for the reasons above stated, the plastic particles of a stiff soil are removed, and moisture, either from rain or dew, is more freely admitted and absorbed; and having penetrated deeper into the soil, is retained, as if by a sponge, for a longer period. Farmers who are familiar with stiff soils, know full well that they will not admit heat near absorb moisture so readily as those which are lighter, and the latter do not bake and become so hard and dry as the former—besides, a purely clay soil is always cold at a short distance below the surface.

Such soils, so improved, have increased capacity for imbibing heat from the action of the sun by day; and this heat is maintained for a longer period at night; and hence, a protracted evaporation or emission of heat is secured, which, acting upon the cool atmosphere of night, produces a greater amount of dew. The soil is therefore rendered capable of creating a larger supply of moisture—of imbibing more heat, and of receiving and retaining these agents of vegetation alternately, for a more protracted period. Dew is occasioned by a cool atmosphere coming in contact with the exhalations from the heated earth, or

view water, and hence a condensation of the aqueous particles; the dew-drop of evening is first seen upon a blade of grass at its highest point.

Heat and moisture are necessary to vegetation, and the more you can obtain of these agents for your plants, the more vigorously will vegetation be sustained. LIME, when applied to a stiff soil, renders it more friable, porous or mellow, and it becomes more easy to cultivate; the plough does not meet with the same resistance; the roots of the grass and weeds are more easily separated from the soil, and may therefore be more readily destroyed, and a thorough tillage or pulverization of the land is thereby greatly facilitated. Besides, we find that vegetation is most vigorous where the soil is adapted to secure the largest amount of these supplies; and consequently that soil which by nature or cultivation is capable of imbibing and retaining the largest amount of these indispensable elements, has the greatest capacity for producing vegetation. A sandy soil appears so porous to retain heat and light, to supply so important extent a condensation of the atmosphere, and thus supply itself with sufficient moisture from dew—besides, it is too readily drained; while a clay or compact soil becomes indurated upon its surface, and heat from the sun cannot sufficiently penetrate it to be available for a like purpose; but when these are properly mixed and combined with other earths, such as lime, marl, or with manure, the soil opens its pores to receive the invigorating influence of the sun during the day, and at night the heated exhalations escaping from it, producing a greater amount of dew, supply the plants, nestled in its bosom, with necessary moisture from the pure and bounteous fountains of the atmosphere.

Some farmers think that lime is injurious to wheat land—that it makes the soil cold, and that their lands, when dressed with it, are more apt to produce mildewed grain than they were before it was applied. That this, in many instances, has appeared to be so, I do not doubt, because the soil, by its application, is rendered more productive, and therefore we have more grass, which, under our present system of sowing grass seed with wheat, is injurious to that crop, as I have concluded in a former paper. Till, in his excellent Treatise on Blight, says, "What being doubtless originally a native of a hot country, it requires by its constitution a considerable degree of heat to bring it to perfection; and if much of that degree of heat is wanting, it will be the weaker, and when the solar rays cannot reach the lower parts of the stalks, the lowest leaves and knots cannot do their office;" and hence the maturity of the plant is protracted, because "the lower parts of the stalks must receive the greater share of heat, being nearer the point of incubation, the emanations reflected by the ground." Being deprived of this genial and life-giving heat, since it is shaded near the roots by grass, and being imbedded in too moist and cold a soil, it has not the power of elaborating its sap or evaporating its fluids, and is therefore slow in ripening; and hence the crop becoming diseased, is frequently destroyed by mildew.

In the application of lime to land, much care and close observation is required, to produce the best results. The farmer should not be too generous; he should not forget that lime and earth constitute mortar, and therefore his care should be only to apply so much to his soil, if light, as will render it sufficiently compact to retain moisture and heat; for a sandy soil is composed of spheroidal particles, and is too readily ventilated and drained of its moisture, and being mixed with lime, the interstices being closed, the soil is greatly improved. After several years of experience and careful observation, I am convinced that lime, when applied by the hand, and mixed with manure, produces much more productive; that manure, when applied to it after a dressing of lime, will have a much more lasting influence than it would have had before its application. Upon heavy soils, lime should be applied only in such proportions as will render it most mellow or friable; any thing beyond this, will be found to be injurious. It is not natural, as I apprehend, whether it be put on in a hot or cold state, because it is soon cooled under the atmospheric influence after being slaked, and cannot be ploughed in after it has spread before it becomes chilled. I usually apply it in the spring, when preparing for corn, the working of which, and the preparation of the land for subsequent crops, demands its mix with the soil. I obtain the lime when ready to apply it, have it placed in a situation convenient for water, where it is immediately slaked; and as it falls, it is carried out and spread upon the land previously ploughed, which, after being harrowed, is struck out and planked. I have

applied it in other ways, but the results were never so satisfactory.

I have been told by some farmers, that the greatest benefits from the use of lime on their land are exhibited in about seven years after its application; some say in four years; some contend that they have seen its effects the second year, and others say that they never saw any effect whatever from its application, although they put it on in generous quantities. Now, I verily believe all these statements to be true, and I account for this singular anomaly in the following manner. In the latter instance, the lime was ploughed in so deep that it was never mixed with the soil, and therefore produced no effect; and in the former, the admixture took place probably in one, four, or seven years after it was applied. In some cases, it is said, land has been injured by it. I am inclined to believe that in these cases the farmer has been too generous, and would recommend as a corrective, that he plough deeper, and thereby mix more earth with his lime. He will therefore have the advantage of a deeper soil. As the quantity best adapted to improve most soils, I would recommend from forty to fifty bushels unslaked to the acre. I have found excellent results on sandy, clayey, and heavy soils, from the application of that quantity. As I have never farmed limestone or red shell soils, I cannot advise respecting them.

There are repeat, mix your soil well with the lime which you may put upon it—pulverize it thoroughly—destroy all natural vegetation, if you wish to raise natural crops—exercise a sound judgment as to time and method, and you will seldom have reason to complain. In this part of Pennsylvania, at least, either of an ungrateful soil, or an unfavorable climate.

KENDERTON SMITH.

The Flowers of Summer.

In writing our sketches of the flower garden, we have not had leisure to examine what we said in our first volume on the same subjects; and possibly some things may be repeated.

Fuchsia is a splendid genus, and 17 species were known in 1829. The single flowers are gone in a few days, but the double are more durable. The earliest kind that we have seen is *P. tenifolia*, which spreads through the ground, and in a few years forms a stool of several feet in diameter—flowers single, of the brightest crimson.

Soon after appears *P. montana*, a shrub from China, growing to the height of three feet in England, and attaining the same stature in this climate. A well grown "tree" (for so it is called) may be three feet or more across, presenting a magnificent display in all its varieties that have come under our notice, though the flowers vary in color. It is hardy, and starts to grow very early in the spring.

P. officinalis was introduced from Switzerland in 1548, and has spread into some fine varieties. The double ones are the common crimson, the rose, and the whitish, or the *albicans*. Sabine's crimson is one of the finest of the single sorts.

This plant and *P. corallina* are the only two species credited to Europe, the eastern side of that continent having furnished most of the species. *P. albiflora* (called the Chinese) though herbaceous, sometimes attains the height of 4 feet, and is very showy. Four double varieties of this species are now blooming in our garden, viz: *Immel*, *Whiteley*, *Argentea*, and *Reevesii*—the last, a blue color, fading after it opens. This species grows freely from seeds, springing up in many parts of the garden, but requiring several years to bring them into bloom.

The glutinous locust (*Robinia viscosa*) produces its pink flowers in abundance; and but few trees are more ornamental. It increases sufficiently from its horizontal roots. It is a native of the Southern States, though hardy here; and is classed with timber trees, sometimes growing 40 feet high, according to Elliott. In this northern land, however, it has the habit of a shrub—10 or 15 feet high.

Philadelphus. This genus of six or eight species, produces only white flowers. *P. hirtellus* is much

taller than *P. coronarius*, though London only raised it 3 feet high! The flowers are also much larger, and whiter, but scarcely so fragrant. The variety called "double flowering," has not a tenth of its delicacy. Another called "maius" is hardly worth cultivating. Both these varieties belong to *P. coronarius*, which is a native of Europe.

The flowering ash (*Ornus europea*) at the height of 5 feet bloomed with us this season for the first time. The flowers are white, very small, and grow in panicles.

The *Iris* is finely represented in this month. A large kind with light blue flowers, is remarkable for its delicacy; and appears to be a variety of *I. germanica*. Four tall sorts with yellow flowers also shine out. While most of the species exhibit their blossoms conspicuously on their summits, one called the blue *Rosa*, hangs its flag half mast high—down among its leaves. Two bulbous species from Spain (the Spanish and the English) have run into many varieties—of each kind have been advertised; but though some of the Spanish *Iris* are beautiful, others have a harsh or dingy aspect, and are not worthy of cultivation. All the sorts that we have seen of the English *Iris* however, are splendid.

Wistaria spiræa, a twining shrub, with blue purple flowers in dense racemes, is a native of the South but endures our winters. It deserves a place among fine plants.

Spiræa urincea, 4 feet high, is very showy; though its white flowers are small, they are very abundant. Its inflorescence is also singular. In our opinion, it is finer than any herbaceous species from the eastern continent; and a worthy congener of the American variety of *S. lobata*.

Dracopis platensis resembles the *Hyssopus* but its flowers are a fine rich blue. It is an old inhabitant of the gardens.

Jasminum laurifolia is the only species of the genus that succeeds here in the open border. It is at times sometimes damaged by the winter; but when it frosts are not very severe, its yellow star-like flowers make a pleasing display in the following season. It is probably a native of Italy.

We have two varieties of *Chionanthus virginicus* now in flower both nearly of the same age, but the broad leaved kind is the taller, with fewer blossoms. The narrow leaved variety is loaded with bloom. This is the white Fringe Tree.

The fine purple flowers of *Verbascum purpureum* may be seen by early risers, but they begin to shrivel as soon as the sun shines out with power.

For Lilies, Pinks, Roses, &c. see New Genesee Farmer Vol. 1.

Spurious Ruta Baga Seed.

Messrs. EDITORS—Last season one of our merchants bought a quantity of ruta baga seed, and sold it out to a number of farmers in this vicinity. It came well, and the plants appeared like genuine till after the second hoeing, when the roots were about as large as a man's finger, the tops then all branched out and run up to seed; so that the crops were an entire failure, much to the disappointment and loss of the farmers.

On inquiry, it was ascertained that the seed was raised from small ruta bagas, and was surrounded or mixed with mustard when growing.

Now, I wish to ask whether the mustard caused the degeneracy of the ruta baga seed, and if not, what did? If you, or your correspondents can explain this matter, it may be of service to others. We farmers are, at best, slow enough to adopt any new article or system of cultivation; and when failure or disappointment occurs, it often tends to check, if not entirely

ent, the introduction of valuable improvements. One of those who sowed the above seed, had never sown growing turn bags before; and this failure discouraged them so that they will not try again.

Respectfully yours,
ERASTUS SKINNER.
Pittsburgh, N. Y., June 18, 1881.

Remarks—Several instances of disappointment, later to the above, have come under our observation. In ten years past; and we have taken some pains to ascertain their cause, although we have not always succeeded to our own satisfaction. The different species of the genus *Brassica*, including the whole cabbage and Turnip family, not only mix with each other very readily, but are very liable to degenerate in want of care in raising the seed, or other unfavorable circumstances. In reference to the case mentioned by our correspondent, we do not think the standard was the cause of the evil, although we do say it might not have been. Mustard (*Sinapis*) considered by the botanists, a different genus from turnip; but it is of the same natural family, and so these evident marks of relationship that it is more probable they will mix, when in blossom together.

But if this had been the cause of the difficulty, plants would not all have run up to seed uniformly.

We therefore conclude that the true cause was other one alluded to—namely, *degeneracy*. It is noted that the seed was raised from small roots—perhaps from a crop that was not worth harvesting, and therefore left in the ground over winter, and allowed to go to seed—and it is not certain that the process of generation had not been in operation several years. In all events, it is well known that the greatest care necessary in raising all kinds of turnip seeds, is that it be raised under favorable circumstances; and no more care is usually bestowed on this business in England, together with a more favorable mate, it is generally found that imported seed produces better roots than that raised in this country.

Weather--the Crops--Harvest Prospects.

The longest and most severe season of drought ever known before harvest in this section of country, has been experienced this season, and we believe the same may be said of most parts of the United States & Canada. For about six weeks, scarcely enough rain fell in this vicinity to moisten the surface of the earth, or to encourage the hearts of its cultivators. At one week ago, however, there commenced a succession of the most fruitful showers that can be imagined; and all nature now rejoices under their reviving influence. About 10 days since, we passed over part of this and several of the adjoining counties. It was truly melancholy to witness the suffering crops, and to hear the mournful complaints of the farmers. And truly many crops have suffered, past recovery. Grass, of course, is very light. Oats and barley the same. Corn that was planted early, and in rather moist soil, looks well, but some pieces are entire failures. Wheat is generally light, and must all somewhat short of an average crop, although we think it will be better than many have represented. Potatoes come up slowly, and are very backward, but here is still time for them to recover. Beet and carrot seeds, sown early, have mostly done well, but those sown later have generally failed, as is always the case in dry weather.

The latest accounts from other parts of the country, form a cheering contrast with those received two weeks ago.

"The New York Express states, on the authority of personal observation during an extensive tour, in the most productive parts of New Jersey and Pennsylvania, that the appearance of the fields of wheat, rye and oats, promises an abundant harvest."

"The Richmond (Virginia) Star says:—A great deal of wheat has been cut, and we rejoice to understand, is of a very promising character. Indeed the harvest promises well. The probability is, that flour, the great staple will be very low during the coming year—and that is no slight comfort to poor people."

"The Albany Morning Advertiser says:—The crops throughout the country, generally, are represented as promising. Though in some parts we notice there may be a falling off, yet the average will be a good one."

"The Fort Wayne (Indiana) Sentinel says:—The season here has been remarkably backward, but crops are now coming in finely. Wheat never did more for an abundant harvest. Oats and grass are equally promising. Corn is more backward, owing to the wet and cold weather about planting time. Some did not come up well, but we have had fine weather for several days, and it has grown astonishingly."

Wheat Prospects—We have the most flattering accounts from all portions of our country, of the prospect of a plentiful harvest. An unusual quantity of wheat was sown last fall, and its appearance now indicates a great yield.—*Huron (Ohio) Advertiser*.

The Painesville (Ohio) Telegraph, of a late date, says:—

"Farmers may now obtain seventy-five cents cash, for wheat, in our streets. For Oats, 25 cents; potatoes, 16 cents."

These advanced and advancing prices, and sales for cash, are encouraging to our farmers, and inspire all with fresh hopes of better times. The prospect now is, that notwithstanding former fears, the present will be a season of great abundance."

The Crops—The Germantown (Pa.) Telegraph says:—"Our farmers have begun to earnest their haying, though much of the grass appears, from the backwardness of the spring, to be yet growing. The crop generally, is as good as in any ordinary season; and although the weather enables it to be harvested without injury, the supply of this staple production, which it really is here, will be equal to the demand of the customary prices."

The accounts from the western portion of Maryland are decidedly favorable to the growing crops. In Frederick they had refreshing rains last week. The last Uniontown (Pa.) Democrat had a paragraph complaining of the drought, but its complaint was cut short by copious rains which commenced falling on Monday.

The Savannah Republican has intelligence from the interior of Georgia, that the promise of the coming crop, now considered a half secure—is good, the wheat in Upson county, where the harvest is commencing, very good, the cotton crop, rather poorly for the present.

The (New Haven, Conn.) Farmers Gazette, of June 25, says:—

"If fine weather, and an abundance of it, can have a beneficial effect on the crops, there is reason to believe that our farmers will this year have no cause of complaint. The frequent and copious showers of the past week have had a most happy effect on the vegetation of this neighborhood, and disipated the fears of those who have been disposed to distrust the goodness of Him who has promised that the earth shall yield food sufficient for man and beast. We are told that in consequence of the rain of one day last week, the price of hay was reduced two dollars. Except in some upland meadows where the drought was particularly severe, it is supposed that the crop of hay in this vicinity will be as heavy as an average of several years past."

Sowing Corn for Fodder.

The severity of the drought in the present time, threatens to diminish greatly the crop of mowing grass the present season. Red clover is now putting forth its full bloom, while the stalk is not more than ten or twelve inches high, instead of twenty-four inches, which it ought to be. The fax tail, or timothy as it is generally termed, is now shooting out its head, while the stalk, on dry soils, is scarcely a foot high, when in favorable seasons it would be two and a half feet. There is great reason, I think, to apprehend that the crop of mowing grass will be diminished one half. The season is so far advanced, that moderate rains, even now, could not, I think, retrieve the crop.

To the farmer who has a large stock to sustain through another winter season, and whose calculations for a competent supply of food for them, are based on the certainty of a good, fair, average crop of mowing grass, the present prospect, I think, must cause much

mixture; and should the drought continue, even a little longer, it may also seriously affect our root culture. In this state of things, I consider it an act of prudence to look about me, and see what remedial measures, if any, we can resort to.

In the course of my experience I have known occasionally just such a state of things. I have known not only just such, but much more pressing necessities to exist; and the best practical course I have ever pursued, has been to sow a crop of corn, broad cast, as soon as the deficiency of the hay crop had become certain.

A small amount of good ground thus cultivated, will produce a very great amount of excellent fodder. I have sown from one acre to six acres. The product will be prodigious—several tons per acre.

My practice has been to sow two and a half bushels good seed corn per acre on the furrows before harrowing; then to drag it thoroughly the same way it was ploughed. The seed will fall mostly into the furrows, and being well dragged, will thus be deep enough to have strength of root sufficient to sustain a fall crop. I have tried different quantities of seed. The results from the quantity named above, I have found most satisfactory. With this quantity the stalks will stand so thick as to grow up tall and slender. Cattle will consume them entirely.

One, by no means unimportant item in the value of this crop is, the means will ordinarily be found quite a quantity of small ears of corn—much of it ripe—a full sufficiency for stock which has been accustomed to a moderate feeding of grain during the winter season.

To harvest the crop, the sickle is used most advantageously. When cut, the stalks should be cut in small bundles, and be set up to cure in small stacks; and when stacked for winter, let it be stacked next the South, around a stake pole, only the length of a sheaf from the pole. In this case the butt, or bottom end of the stalk, will all be exposed to the air, and the process of curing will be gradual and safe. It must be remembered that it is an exceedingly succulent stalk, and is cut green, and will need care and time to safely cure it. I have lost a large quantity by heating, after I considered it cured, by putting it into a large stack, so as to exclude the air.

Another benefit of this crop is, if sown about this time, it can be followed by wheat in the fall. It can be cut, and taken from the ground in good season to sow wheat. I have had turf ground turned over, sowed with corn, and found it in a more satisfactory condition for wheat, than when summer fallowed.—The ground has been kept damp and moist by the shade of the corn, and the turf has been sufficiently decomposed. A single ploughing after the corn is cut off, is all that is needed for sowing.—*Rochester Daily Democrat*.

The following remarks, by professor Dewey, were suggested by an article on this subject in our last.

Killing Rats.

Thénard has proposed sublimated hydrogen. The question is, how can it be applied? I use a tubulated retort, containing all the materials except the sulphuric acid. When the neck of the retort has been surrounded with mortar in the rat's hole, the sulphuric acid is to be turned in through the tubulure, and the stopper immediately inserted. The gas will then pass into the hole, and to the lower parts, as its specific gravity is a little greater than that of oxygen gas, and about one fifth heavier than atmospheric air. While the gas is very fatal to animals it is not so to man, at least to near the same extent. Chemists often breathe considerable of it. Probably no danger would result from using a common retort, the neck of which should be mortared in the hole expeditiously. It is more probable that a worse evil would result from the death of numbers of rats in an inaccessible place. The existence of the sublimated hydrogen will be known by its offensive odors, which is that of putrifying eggs. If the rats cannot escape, they will doubtless be poisoned. If they can escape by means of their various passages under ground, they will flee with all rapidity from so noisome and fend an intruder as this gas. This effect is as readily produced by the beating of a drum in the cellar, without any exposure to a substance so offensive, and at a much cheaper rate.

Locust Trees in the West.

The *Forest*, Ill., Democratic Press, in an interesting manner, gives the great profits of cultivating this tree. It is of advantage to cultivate it in any section of the U. S.; but here on our prairies, where so much is made of the scarcity of timber, it is worthy of much attention. Besides being of most rapid growth, it furnishes one of the most durable kinds of lumber; and if rail-fences are to be used (which we trust will not be generally,) the farmer will find it for his interest to give immediate attention to its culture. The Press makes the following estimate:

Prairie, 10 acres, at \$3 per acre,	\$30
Rails and putting up a fence round do.	60
Seed and attention to nursery.	25
Subsiding up rails, putting it in order, and setting out seeds,	40
Back upon attention to same, fence, etc.	35
At 6 per cent compound interest, this sum, \$100—in ten years will nearly double, making	350
Deduct this from 6,400 trees, 12 years old, say at only 50 cent each	3,200
Leaves a net profit of	\$2,850

If we remember right, on the old homestead in Conn., they used to get \$1 per cubic foot for this timber for ship-building; so that the estimated value of the trees at 12 years old may be considered quite low.

The following are the instructions of the editor for its cultivation, who says he is qualified by experience to give advice. He significantly remarks:

"You'll begin this spring. The locust is raised either from the seed or suckers; but as the former is made as best adapted to our present uses, we shall confine our remarks to it. Suckers are of a half or two rods of ground that has been under cultivation several years, and which is of a rich loamy soil, neither too wet nor too dry; put it in fine condition, and having procured the seed, in order to make them vegetate freely, pour upon them boiling water and let them soak a few hours. Then sow them in drills three or four feet apart, and two or three inches distant in the drills, covering them nearly as thickly as you would corn. But we advise you bear in mind that this should be done while the earth is moist, and when done the whole should be covered over with a roller of sufficient weight to press together the earth so as to favor the retention of moisture which will accelerate the germination of the seed. If these directions are strictly adhered to, the seed will come up as certainly and regularly as beans, and in many cases the young trees will attain the height of four feet the first year. Care should be taken that they be kept free from weeds, and they may remain in their seedling location two years. At the end of this time, transplant them to the ground designed for the purpose, and which must, during the time the seedlings occupy their place in the nursery, be enclosed, broken up and prepared for their reception. There is no difficulty in transplanting them, and where the roots are taken up carefully it is a rare case to see a tree die. To give the above number of trees in the 10 acres they must be set at 8 by 24 feet apart. In about two years after they are set out, the ground will afford a superior pasture to which it may be applied without detriment to the trees."

"But, you'll say we have made no allowance for proper calculation. True, we will therefore now throw in, to make up for that objection, the ten acres of land with the locust stumps, which will be of immense value for a new growth of trees, that will follow without a nursery, and with less care, more certainty and greater rapidity, than the first crop, at the same time affording an almost inexhaustible source for locust suckers."

The Fruits of the Soil.

The statistics accompanying the returns of the last census show, that the sixteen millions of people who live within the limits of the United States, possess lumber to the value of upwards of eleven millions of dollars, which, with brick and stone of an incalculable amount, constitute the materials for their dwellings. The income of their orchards which grow around these dwellings is upwards of six millions of dollars in value. They had more than twenty-six millions of pounds of wool to convert into broad cloths, blankets, and hosiery, &c., with which to shelter their persons from the inclemency of the weather, more than a thousand million of pounds of cotton to manufacture into various useful and necessary garments, and more than three hundred thousand pounds of silk for elegant fancy dresses. The amount of their flax and hemp united, was nearly a million of tons.

For the food that we live to sustain and nourish them, they had, the last year, more than 73 millions bushels of wheat, equal to more than 14 millions of barrels of wheat flour, a rare article with those who subsided and settled this domain. They had also more than seventeen millions of rye; upwards of six millions of buckwheat, and three millions of bushels of barley. The value of the poultry that stalked about the yards and enclosures, was more than nine millions of dollars. The number of swine was upwards of twenty millions, and the number of sheep more than nineteen millions.

These people of the United States had the last year, more than 300,000 bushels of Indian corn, and more than ninety-nine million bushels of potatoes, and upwards of thirteen millions neat cattle, which furnished them milk, butter and cheese, &c. to the value of more than thirteen million dollars. They had at their command the labor of more than three millions horses and mules, and upwards of one hundred and six millions baskets of oats, and nine millions of tons of hay, on which to feed these and their other cattle. To sweeten whatever seemed acid or harsh to the taste, they had more than two hundred and eighty million pounds of sugar. Their land yielded to them, for their indulgence, more than seventy-seven million pounds of tobacco, and upwards of two hundred and seven thousand gallons of wine with which to cheer their hearts. Such is the income of the soil only; and yet with all this income they are over head in debt. The public debts alone, in a time of profound peace, are estimated at near two millions of dollars.—*New York Journal of Commerce.*

The Silk Business in Pennsylvania.

On Saturday last, we visited the extensive cocooneries owned by Judge Blythe and Maj. Saxeville. These enterprising gentlemen have three cocooneries in the vicinity of our borough "on the full tide of successful experiment," and by their estimate they are now feeding between four and five millions of silk worms. As yet the worms are all healthily and doing well, and we trust these gentlemen will meet with the most perfect success in their enterprise, as it will have a tendency to encourage others to go into the business. We have also since visited the cocooneries of Wm. Bell and the Rev. John W. Brainerd, and in the building of the latter gentleman, we saw a large number of his worms spinning, having come to maturity and spun their cocoons in three weeks, notwithstanding they are called four weeks' worms. In regard to the durability of Pennsylvania silk, we can speak from experience. The writer of this article has worn a figured satin vest for two seasons and has it on now for the third, and the service it has gone through has not been of the ordinary kind; yet it is neither worn through at the pockets nor frayed at the arm holes. We sincerely hope that the business may go on and prosper until we are able to manufacture all silk goods worn in this country.—*Keystone (Harrisburg, Pa.)*

Protection Against Drought.

In tillage, the best protection against drought that can be conveniently procured to a great extent, is frequently stirring the earth, so as to keep light and loose. In this way, the earth at the surface is in many small particles, and thus serves as a non-conductor of moisture, and retains it below, where the roots obtain a supply.

On the contrary, when the earth is hard and compact, the moisture is freely conducted off through it, even to a great depth, in a very dry time. As an illustration, if one end of a long bar of iron be put into a fire, the heat will readily pass to the other end; but if that bar be cut into pieces of one inch or less in length, and laid along in the manner of a bar, the pieces would touch in some places, and in others there would be a small space between them; and on heating one end, the other would not be affected, as the heat would not pass but a small space through the pieces.

Again, we will suppose that a fire of intense heat be made on a block of iron, that is four feet square, and ten feet high, the body of iron would first become heated downward, even to the bottom. Now, if that iron should be cut or broken into fine pieces, and a body of iron formed of these pieces, of the same size as the block, and a fire of like degree of heat made thereon, the fire would work down slowly, after penetrating a small distance through the many particles, and the air intervening between them. We give this as the theory. It is the practice, as in all other things, that we rely on as the foundation of true science.

There is in a dry time, a great quantity of moisture in the earth, that is continually rising and passing off in evaporation; and if this evaporation can be prevented,

ed, in a great measure by a non-conductor, of moisture at the surface, the plants will suffer comparatively but little. This is abundantly shown in practice.

Those who have not witnessed from experiment and observations the advantages of fine loose earth at the surface, as a protection of plants against drought, could not be likely to suppose its effect great as it is, though the theory is plausible and reasonable. Corn and other vegetables that have been in a hard, extremely dry time, have flourished with a moderate rain, but for experiment, were nearly a fortnight in drought.

We decided the powerful effects of this protection last season. We cultivated a few acres, mostly land, and the drought was severe indeed. Where soil was frequently stirred and kept light and loose the top, there was a constant moisture a short distance from the top; but where the earth remained undisturbed it dried to a great depth.

A narrow strip, running across the piece, was for turnips, and remained unploughed. On this spot became dry below the usual depth of ploughing, and the weeds were almost dead for want of moisture, while at the side, weeds of the same kind in the edge of the ploughed ground, were fresh and vigorous, and the soil was dry only a few inches on surface.

Where some grain was sowed, the earth was down six or seven inches; while by the side of where the soil was often stirred, it was dried only three or four inches. And in this latter case, moist earth had a good degree of moisture, while former contained but little.

On this subject an intelligent cultivator observes that he would rather have six men among the ploughs, turning the earth, than to have six men among the weeds, than to have the same number of men engaged in watering the plants.—*Yankee Farmer.*

The Duty to Labor.

"The world owes me a good living, and I'll have it," says some blockhead, as he finishes a luxuriant feast; "here, landlady, another bottle of your prize Madeira!" Had a friend empty-headed man, who gazes on him by stealth, in silent admiration, the sentiment with a shout of applause: "That's the world owes me a good living and we'll have it! landlady, more wine here! 'we won't go home morning.' Let's go it while we are young. We care for the expense?" The consequence of this the pilfering of money drawers, the ignominious of employment gentled inferiority, and so on, until of these enterprising gentlemen, in eager pursuit the 'good living' the world owes him, puts the workman's name to a check, or in some kindred way, a ticket for the marble palace at Sing Sing, where the State provides a 'living' for those who cannot earn a living, but just such a one as consists with its own estimate of their exalted merits.

The great error in this case is in the original aim. It is false and detestable. "The world owes you a living?" How yours? Have you earned by good service? If you have, whether on the soil, or in the pulpit, as a toiler or a teacher, you have acquired a just right to a livelihood. But if you have eaten as much as you have earned, or—worse still have done little or no good in the world, the world owes you nothing. You may be worth millions, unable to enjoy every imaginary luxury without car expense; but if you have done nothing to increase sum of human comfort, instead of the world owing you a living, as it is here tabulated, you are morally bankrupt, and a beggar.

Mankind are just awaking to a consciousness of duty resting on every man to be active and useful his day and in his sphere. All are not called to or how—to plough or plane—but every man has sphere of usefulness allotted him by Providence, it is unfaithful to his high trust if he deserts it for a pomp or heedless luxury. One man may be fitted nature and inclination for an artisan, another for a soldier, and a third for a merchant; but no man ever born, fitted only to be an idler and a drone. Those who become such are the victims of perverse circumstances, and a deplorable false education.

"But has not a rich man a right to enjoy wealth?" Most certainly! We would be the last to deprive him of it. He has a natural and legal right to possess and enjoy it in any manner not injurious others, but he has no moral right to be useless because he has superior means of being useful. Let him surround himself with all the comforts and true luxuries of life; let the masterpieces of art smile on him in galleries, and the mighty minds of all ages speak him from his library. Let Plenty deck his hoard, and

men of those he loves, another joyously around it, in possession of abundance, the means of satisfying pure and just desire of his nature, and becoming wiser, nobler, larger in soul than his less fortunate neighbor; but let him never forget—as if pronounced he never can—that it is his solemn duty to be useful to his fellow-creatures, especially to the aged and suffering—to labor for their benefit, and to be blessed by, or their elevation. "Those whose duty is to serve idleness with which luxury and idleness have locked up to Power and Wealth—the means which the trampled millions have snatched from the cars of conquerors and other sources of the rich, are fading and lightning forever. In the twilight of this succeeds this gross darkness, there comes a social anarchy which men have lasting in the struggle which those blinded and bound them, resolves to do nothing, to decay and prostrate all who inhabit the lowest level. Now the laborer with his spirit returns hither for the constant one cast upon him and says, 'What good is there in any thing but the labor of the hand? Away with all else! Those whose duty is to serve idleness are deceivers and fools!' But is a transitory condition. The world soon learns to respect its benefactors in whatever sphere, and to prize that he who truly and honestly exerts himself in some department of useful effort may justly claim otherworldly with all who toil, make and earn. Let each cease to look down on the poor—the merchant the porter; let each respect the dignity of Man, in his own person or in that of his less fortunate brother. Let laughter and pride on one side, envy, jealousy and hatred, with their train of evil consequences, will vanish from the other, and animated by a common kindness, will move forward in concord to the attainment of the highest good selected.

Flower Garden Cultivated by the Ladies. A neat Flower garden in front of the farm house, roof that the farmer's wife and daughters are industrious and refined. It is proof that the work within is well performed; for it is never the case that order and thriftlessness reside within, while the garden—tended by female hands—is neat and flourishing. This out-door labor gives bloom to the cheeks, and to the whole frame, cheerfulness to the disposition, and general efficiency.

A fair and gentle woman is never in a better school than when busying her fingers and twining her fingers around the fair dew-droppers of Flora. There she struggles with beauties whose tongues never utter evil or malice, and whose cars are deaf to every idle or unkind word. There the lovely and innocent one speaks to of the more lovely and innocent One who delineates their graceful forms and paints their rich and delicate colors. Purer, richer, better, are the teachings of shooting blade and opening flower, than come in the musings of a listless mind, the pages of romance, or the gossip of corrupted society. The seeds, health, and purity, are in the soil on which the kind and pinrose grow, and those who labor to prove the fragrance of the latter, will taste the delicious it which the former bear.

Fear not, ye busy wives and daughters, that the care of a small flower garden will be a burden, rendering more arduous the labors of the kitchen, the iron room and the needle. For the invigorating exertions of the freshly turned soil, the draughts of oxygen which will be found among your plants in the warm sun is expanding their foliage, the riot of exercise which the garden gives to body and mind, together with the pleasure derived from the duty and fragrance of your flowers, will furnish you strength than the labors of the garden will exhaust.—*New England Farmer.*

Leisure Days.

By these we mean days in which the care of the house does not require attention—days when the farmer can look about him and turn his hand to some odd job. Usually there are several such days in June, and the manner of their employment is no small matter. Of course it is not in our power to tell you what is the best use on your particular place—for one man's work of stone fence is to be built; on another an archedrone is to be completed; on a third the ditches require attention, &c. &c. But at these times keep a sharp look out for manure making. The swine must be frequent supplies of the raw material, and leaves, oil, mud, &c. must be deposited near the bog yard, so that in the busy days of buying, something may be thrown in, and your boys not left without means of doing their proper work. These days for white washing, for cleaning up around the house and

barn, for reasonable repairs, and the like, are among the most profitable of the season. We class them under the head of leisure days, but they should be far from days of idleness: more of the profits of husbandry is obtained from the good judgment and perseverance with which improvements and plans are executed, (we mean the gradual improvement which the good farmer will have no eye to, and will carry on at once when the cost will be but little)—more of the real profits of farming turn upon these than upon the ordinary crops of the farm. Where soil and manure are alike, one man can obtain a good crop as another, or nearly so; the skill is not so much that of planting and hoeing, as of increasing the manure heap, increasing the depth of the soil; protecting the land from drought, and draining those that are too wet; the mixing of soils and sowing the manures to the soils and crops to which they are applied. These are the important matters; and many of them deserve attention at this season of the year.—*Id.*

What should Parents do with their Boys?

Many parents have sons, whom, when they arrive at years of discretion, they are uncertain what to do with. For instance, a respectable mechanic has a good, stout, hearty, well disposed son, whom he wishes to bring up respectfully. If he is in easy circumstances, he sends him to college to study; if he is in a poor one, he sends him to a trade school to learn a mechanic. He therefore concludes that he must send him to college, and make him a lawyer, a doctor, or a clergyman, and the honest well meaning parent labors hard to earn money to pay the expenses of a college education, for the purpose of making him a gentleman, to make him take a higher rank in the world than that of a mechanic. Here is a great mistake. When the boy leaves college, what is he to do? He is then just qualified for nothing. He turns pedagogue for awhile. He bends learning into the youthful progeny; but few, very few, think of pursuing the business of a school master as a permanent profession. After continuing it for a year or two, he quits it, and commences the study of one of the learned professions. Here are three or four years spent in preparing to become a professional man, and at much additional expense to his father. He is at last admitted to the bar, or receives a degree of M. D., or is ordained to preach. The next thing is to get a living by the profession he has chosen, and this is not so easy a matter. All the learned professions are full to overflowing, and there seems to be no room for new beginners. The consequence is, that the young aspirant for eminence, dings along, without getting business enough to pay the rent of an office. Year after year he toils, or would toil, if he had any thing to do, without making half enough to pay his own expenses. To be sure, there are some, whose superior intellect and commanding talents will enable them to rise at once to eminence, and to command a business which will render them independent; but these cases are few and far between.

When such do occur, the superiority of mental power will shine out beforehand, and should be fostered. But the propensity which some mechanics have of bringing their son up at college to make them more respectable, we think to be a great error. It is injuring a son more than it is benefiting him, unless some extraordinary mental energy displays itself in the youth. He goes through college, and thence,

"Proceeding from a graduated dunce,"

he is just fitted for—what? He has spent the best part of his youthful days, in qualifying himself for a profession from which he cannot gain a living, or at least a very scanty one.

In our humble opinion, as the professions now are, we should say to mechanics, and indeed to professional men, in ninety-nine cases out of a hundred, give your sons a good education, and then put them as apprentices to some respectable mechanical business. They will then as soon as their time of apprenticeship expired, be independent, capable of earning an honest living at once. The profession of a mechanic is daily becoming more and more respectable, thanks to the good sense and good judgment of the present age, and it can no longer be thrown out as a mark of reproach, you are a mechanic, or the son of a mechanic. It is on the contrary an honor.

As the question has been recently discussed among a few mechanics, what they should do with their sons, we would repeat, give them a good education and then bring them up as mechanics or farmers, if you wish to ensure them a comfortable, honorable, and independent living and station in society.—*Boston Transcript.*

A Grass.—Carbonic acid, water, and ammonia, contain the elements necessary for the support of animal and vegetable. The same substance are the ultimate products of the chemical processes of decay and putrefaction. All the immortable products of vitality resume, after death, the state of form from which they sprung. And thus death is a complete dissolution of an existing generation—becomes the source of life for a new one.—*Lathig.*

Culture of Buckwheat.

Dry light land is most suitable for buckwheat; but when that has been swarded for a number of years and then ploughed but once, a great crop cannot be expected. Something may be obtained this year and a greater harvest will follow in the second year. Any ground that bore turneps, potatoes, or corn last year, and for which you have no manure to spare this season will yield a good harvest. We sow the seed from the twenty-fifth of June to the fourth of July—somewhat the earliest sown produces best and sometimes the latest sown—it depends on the season, which none can forecast. A neighbor of ours, Mr. E. Freeman, keeps one of his light fields on purpose for buckwheat. In the spring he sows rye on the field, and in the last part of June he ploughs in his rye with his horse plough and sows his buckwheat on the furrow. By this practice he is bringing a thin soil gradually to fertility at trifling expense. He took off a fine crop of buckwheat last season, and he uses the straw for fodder for his cattle.—*Boston Cultivator.*

It is a passion proceeding from the misfortune of another. Envy is a passion proceeding from another's success.—*Johnson.*

Go Forth into the Fields.

Go forth into the fields,
Ye denizens of the pent city's mart;
Go forth, and know the gladness nature yields
To the care-wearied heart.

Leave ye the feverish strife,
The jostling, eager, self-d devoted throng;
Ten thousand sorrows, waked anew to life,
Call you with sweetest song.

Hark! to each fresh-clad bough,
Or blissful soaring in the golden air,
Bright birds with joyous music, bid you now
To spring's loved haunts repair.

The silvery gleaming rills,
Lure with soft murmurs from the grassy lea;
Or gaily dancing down the sunny hills,
Call loudly to their glea!

And the young wanton breeze,
With breath all odors from her blossomy cheer,
In voice low whispering, 'twixt the embowering trees,
Woo you to her embrace.

Go breathe the air of heaven,
Where violets meekly smile upon your way;
Or on some pine-crowned summit, tempest driven,
Your wandering footsteps stray.

Seek ye the solemn wood,
Where giant trunks a verdant roof appear,
And harken, while the rustle of some far-flood
Thrills the young leaves with fear!

Stand by the tranquil lake,
Sleeping 'mid willowy banks of emerald dy,
Save when the wild bird's wings its surface break,
Chequering the mirror'd sky—

And if within your breast,
Hallowed by nature's touch, one chord remains
If aught save worldly honors find you blest,
Or hope of solid gain—

A strange delight shall thrill,
A quiet joy brood o'er you like a dove;
Earth's placid beauty shall your bosom fill,
Stirring its depths with love.

Oh, in the calm still hours,
The holy Sabbath hours, when sleeps the air,
And heaven and earth deck'd with her beauteous flowers,
Lie hush'd in breathless prayer.

Pass ye the proud fame by,
The vaunted aisles, by flouting folly trad,
And 'neath the temple of uplifted sky,
Go forth and worship God

[Selected.]

Waterloo Woolen Factory.

Messrs. Farrons.—This factory (cost and capital \$50,000) makes about 6000 yards of dressed woolen cloth per month. Its annual consumption of wool is about 250,000 lbs.; the greater part of which is purchased from the farmers wagons at the factory.

On Saturday last, between 10 o'clock and 4, there was received there over 7000 lbs. of wool, the greater part of which was paid for in cloth. It was comprised of eighty different lots, and came from five of our neighboring counties, including Seneca. For the time being, the sales room was crowded with an intelligent, well dressed, rural population of men and women, many of the latter emporing in their arms those jewels, which the mother of the Girardin¹ did boast of. Some half a dozen clerks had constant employment in measuring and cutting cloth, to say nothing of the brisk and busy duties of the wool sorters, or the more wondrous, though not less laborious task of the superintendent or of that very active director, friend Richard himself.

The cloth which this factory sells in New York, Philadelphia, and Baltimore, affords but little profit at this time, owing to the depressed state of the market. But the home trade was perhaps never more profitable; and, what is better, it is daily increasing and extending. The interests of the wool grower and manufacturer, are fast becoming identical. Our shrewd, intelligent farmers find it better, far better, to give a liberal price to the manufacturer, who in return pays them well for their wool, than to buy the imported article at a lower price, when that very article strikes at their occupation, by destroying the market for their wool.

It is supposed by some woolen manufacturers that the minimum duty under the compromise law of 20 per cent. on imported wools, is not protection enough for their cloth against the imported article. But when we reflect that this duty is to be paid in cash down, *argent comptant*, and that the taxes and extra expense of living to the English manufacturer, is more than another 20 per cent. in favor of our manufacturers, we think, with some self denial and ordinary economy, they will not have to shut up shop.

"The rate that capital is cheaper in England, and that their operatives do not get wages sufficient to enable them, like ours, to monopolize all the *selvins* of the market; but the countless number and enormous weight of their taxes, is more than an offset to our better living. S. W.

Waterloo, June 15th, 1841.

Devon Cattle.

Messrs. Farrons.—I believe it is not generally known to our farmers that Mr. S. Vernon, of Romsey, in the town of Stafford, Gloucestershire, imported a fine Devonshire Bull in the summer of 1830. He was bred by Mr. Day, the celebrated breeder of *Red Devons*, in Dorsetshire, England, and selected by Mr. Hatley, of Stafford, (when on a visit to England,) a good judge of stock, and an intimate friend of Mr. Day. Mr. Vernon holds him at the moderate price of \$3 per cow, and I think he will prove a valuable acquisition to the graziers in Western New York.

Yours &c. W. GARBUTT.

Whitland, June 18, 1841.

Monroe Co. Agricultural Society.

At a meeting of the Executive Committee, held June 2d., the following persons were appointed town committees for the present season.

Whitland—John McVean, Jereh Blackmar, Ira Wood.

Chili—Jacob Strawn, Wm. Toney, John Tuller.

Riga—Dennis Church, Alfred Fitch, Charles Tenney.

Orlen—Wm. B. Brown, Jesse Harroun, John Gair.

Sardin—George Allen, Humphrey Farmer, Frederick T. Root.

Clarkson—John Bowman, David Forsyth, David Allen.

Parnau—Abner Darling, L. W. Metcalf, Roswell Atkinson.

Greene—John Moxon, Nicholas Reed, Asa Rowe.

¹ Her children—these are my jewels said the mother of Girardin.

Guths—Mathias Garrett, Moses Dyer, Caleb Corson.

Brighton—Gideon Cobb, Nathaniel Hayward, Hiram D. Colvin.

Hendetta—Hiram Smith, Joseph Williams, M. L. Angle.

Rush—Martin Smith, Jacob Clapp, Charles Clambrham.

Mendon—Abner Cole, Thomas Walcox, Henry Quimby.

Pittsford—Edward Wilbur, Alexander Voorhes, H. S. Foster.

Perinton—Gideon Ramsdell, Zera Burr, A. Goodell.

Penfield—Henry Fellows, Daniel Fuller, Samuel Miller.

Redster—Byron Woodhull, Wm. Holt, Alpheus Crocker.

Leedsport—S. Shepard, Allen T. Hooker, H. N. Langworthy.

Rochester—Lewis Brooks, Wm. Pukin, A. Clapton, George Whitney, Alexander Kealey, E. Darwin Smith, Henry O'Reilly.

The duties of the town committees are, to obtain the names and collect the fees of members; examine crops offered for premiums and obtain certificates of the same; and attend to the general interests of the Society in the town. (Printed Circulars have been sent them.)

The Annual Fair and Exhibition of the Society will be held at Rochester, on Friday and Saturday the 13th and 14th days of October, 1841. The list of premiums, &c., will be printed immediately and sent to each of the officers and committee-men, and may be obtained at the Rochester Seed Store.

L. B. LANGWORTHY, President.

H. M. WADE, Secretaries.

M. B. BATEMAN, Secretaries.

Rochester, June, 18th.

ROCHESTER, Monday, }
JULY 1, 1841. }

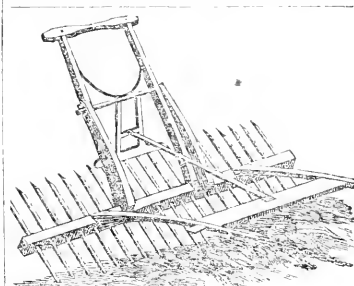
MONKEY MARKET.

Species.	par.	N. England Bank Notes, par.
Indian Dogs, 1 pr per ton	10	10
Pennsylvania, 6 a 10 dis	15	15
Ohio, 10 a 12 dis	24	24
Michigan, 50 dis	24	24
Maryland, 6 a 10 dis	7	7
Superior Bricks 3, 7 do.		

There is no objection in the rate of uncurrent money. The money market is at a stand-still, and is rather tight.

NEW YORK MARKET—JULY 8.

The Flour dealers have still further advanced their pretensions. Since yesterday of common Family Genesee at 5.50 a bushel; Ohio round lump at 5.40 do. do. for lump, 5.50 a bushel; Michigan 5.50, a bushel; Genesee and Rochester 5.50 a bushel. The arrivals are held, and of many kinds the market is bare. The purchasers are confined to immediate wants. Corn has arrived freely, and sales of Southern have been made to the extent of 12,000 bushels, at 50 c per bushel, and 10 c per bushel, delivered; 1000 do. Northern at 60 c weight. The stock of Wheat is reduced, and 1200 bushels are demanded for flour. A parcel of 200 bushels Long Red is sold at 45 c for milling. The Bay of wheat is sold, but we heard of no sales. Small sales of Northern Oats at 11 a bushel. No Southern Oats at Market.



REVOLVING HORSE RAKES.

OF the best construction, are manufactured by P. D. Wright, State Street Rochester—Price \$5. Also, Cultivators—Price, \$5.00 a bushel. July 1.

THE THOROUGH BRED HORSE, FLORIZEL.

FOR the information of those who may wish the stock of this celebrated horse, notice is hereby given that he will stand for mares the ensuing season, at the stable of H. V. Wre, 1 Genesee, and I shall the stable of the subscriber, in Genesee, where passage will be provided, and attention paid to mares from a distance.

Also 15, 1841.

C. B. CARROLL.

PUTA BAGA AND TURNIP SEEDS.

A Full and choice assortment of Puta Baga and all other Turnip Seeds, lately received from England, for sale at the Rochester Seed Store.

June 1, 1841. BATEMAN & CROSMAN

THE THOROUGH BRED HORSE YOUNG HENRY.

THE PUBLIC are informed that the above thorough horse, named by H. Woolsey, Long Island, and owned by the said owner, will stand at Culver's, Rapid Mount, and will be let to mares at fifteen dollars the season. Improved and good pasture will be provided, and possible care and attention will be paid to mares, from a distance and left with the horse; but no responsibility for accidents or escapes, should any occur.

Pedigree.

Young Henry was sired by Henry, the competitor of Eclipse out of Sandhill, by Eclipse. Young Henry is now 7 years old on the 1st of June, and is a splendid figure, with points finely developed, 16 is a dark chestnut, and somewhat over 16 hands high. For further particulars, apply to H. V. WRE, CLIVER.

High on, Monroe Co., N. Y., May 20, 1841.

ROCHESTER SEED STORE—1841.

BATEMAN & CROSMAN, the proprietors of this well known establishment, respectfully inform the public that they have now on hand a general assortment of super English and American SEEDS of the growth of 1840, a new assortment of choice varieties of Corn, Grain, &c.

For the FAIRM—choice varieties of Corn, Grain, Clover, &c., and seeds for Root Crops, such as Mangel Wurz, Sugar Beet, Carrot, Puta Baga, English Turnip, &c. For the HEDGERS—choice varieties of the most valuable and early kinds of clement VEGETABLES. Those which grow greater perfection in Europe, are annually imported from England, such as the different varieties of Cabbage, Cauliflower, Broccoli, Radish, Turnip, &c. Onion seed is obtained from Weathersfield, and other articles are raised for the establishment with great care.

PLANT SEEDS—of all the varieties of the most beautiful and interesting kinds—(Price 50 cents per doz. paper ROOTS AND LANTS—Choice kinds of Potatoes, 2 parsons and Pin-point kinds, Cabbage, Cauliflower and other plants in their season.

TOOLS AND IMPLEMENTS, of various kinds, for Farm and Garden. And a large collection of valuable BOOKS, subjects connected with farming and garden cultivation, &c.

SILK WORM EGGS—of different kinds, on hand in the season.

CATALOGUES gratis on application. Merchants supplied with stocks at wholesale, on liberal terms. Orders from a distance containing a remittance, or good city reference, will receive attention.

BATEMAN & CROSMAN

Acrole Hill, Rochester, April 1, 1841.

ROCHESTER PRICES CURRENT.

CORRECTED FOR THE NEW GENESSEE FARMER, JULY 1, 1841.

WHEAT,.....per bushel,...	\$ 1.08	\$ 1.12
CORN,.....".....	48.....	50
OATS,.....".....	31.....	31
BARLEY,.....".....	37.....	37
RYE,.....".....	50.....	50
BEANS, White,.....	62.....	75
POTATOES,.....".....	18.....	20
APPLES, Desert,.....	50.....	50
Bred,.....	75.....	88
FLOUR, Superfine,.....	4.88.....	5.00
Fine,.....	3.75.....	4.00
SALT,.....".....	1.50.....	1.50
PORK, Mess,.....".....	10.00.....	11.00
Prime,.....".....	9.00.....	10.00
BEEF,.....".....	4.00.....	4.50
POULTRY,.....per pound,.....	9.....	9
EGGS,.....per dozen,.....	9.....	9
BUTTER, Fresh, ..per pound.....	10.....	12
Firm,.....".....	8.....	9
CHEESE,.....".....	7.....	7
LARD,.....".....	6.....	6
TALLOW, Clear,.....".....	8.....	9
HIDES, Green,.....".....	5.....	5
SHEEP SKINS,.....each.....	87.....	1
PEARL ASHES,.....100 lbs.,.....	5.00.....	5.00
ROT,.....".....	4.50.....	4.50
WOOL,.....pound,.....	25.....	25
GLASS,.....ton,.....	10.00.....	12.00
GLASS SEED,.....bushel,.....	1.50.....	2.00
CLOVER,.....".....	6.00.....	6.00
FLAX,.....".....	7.....	87
PLASTER, (in bbls) per ton,.....	6.00.....	6.00
bulk at Wheeland,.....	3.50.....	3.50

The market is very unsound. The various reports in relation to the crops, have a tendency to render the prices fluctuating. Wheat has advanced to quoted prices, and have been some long sold at prices still higher. The supply is small, and demand great. Flour for shipment, up to 4.25, and 5.00, and every variety at that. Corn has a chance since our last. Oats have rather fallen off, if a thing. The market for mares is very quiet. The reports are coming in. Hay is rather dropped off from what was at one time, but is now in demand at quoted prices.



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F. CROSMAN, Proprietors. } VOL. 2. ROCHESTER, AUGUST, 1811. NO. 8. } JOHN J. THOMAS,
M. B. BATEHAM, Editors.

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Still another Call.

We are now incurring large expense, and greatly add the numerous small sums—amounting in all to one hundred dollars, still due us from Postmasters and others. If not remitted soon we shall have to end, what we hate to give or receive—*special Dues*. We fear we shall have to adopt stricter rules next year.

To Correspondents.

Several communications, letters of inquiry, &c., are not received attention this month, owing to our haste. We will endeavor to give a description of a stamp machine in our next. *HELEN* shall receive attention next month—*Is Our Valley near Maple Grove?* Then where are both?

The Harvest.

The Wheat crop of Western New York, like that of Ohio, will fall below an average in quantity, although fine in quality. In several towns in this county the insect has done some injury, but we believe not very extensive. The weather has been fine for harvesting, and the crop is mostly secured in good order.

In Michigan, the Detroit Advertiser of July 26th says, the Wheat crop is very abundant and secured in fine order; but the corn and potatoes were suffering from drought—thermometer 90 in the shade. The Alton (Illino's) Telegraph of July 3d speaks of excessive drought, and potatoes being actually roasted in the hill! A correspondent in St. Louis Co., Missouri, says the Wheat Harvest never was better in Canada we are informed the crop is fair, though not very abundant. The same is reported of Pennsylvania.

The Weather of June and July.

The month of May left us cold and dry, and the drought continued till the 11th of June. The crops, especially grass, clover and wheat, suffered severely, and were saved by the rain before and after the middle of June. In this vicinity, the grass crop is below the average, and the same remark is true respecting wheat.

Over the country it is gratifying to hear that the harvest will be fully adequate for the wants of the people. Indeed, the fine weather, after the rain in June, filled out the berry of wheat to uncommon fullness, and thus the crop is larger than many had anticipated.

It is now obvious that the cold weather of May was highly beneficial, for with hot weather, the drought would have destroyed grass and wheat, and much misery must have followed in this part of the land. The rain of June, however did not much exceed an inch. The 7th and 8th and 31st June were very warm—temperature 90° or more at 2 P. M.

July has been favorable for ripening grain, as well as for buying and harvesting, as it has abounded with fine weather. Considerable rain has fallen in pleasant and short showers; weather warm, and a week from the 2nd very hot. On the 2d at the heat was 93°, and almost as high on the 24th and on both days, above 90° for more than three hours: 24th, very little less heat; and 21st for some time 97°, and above 93° several hours. This was the hottest day for some years in this vicinity—hot indeed over the country. The earth became parched, and occasional showers seemed to have little influence. On the 31st fell a great rain, in showers; in the morning and long before sunrise, still nine o'clock, there was much thunder, and more than one inch of rain fell in an hour. The earth seemed to drink in the excessive and abundant showers, and to be greatly refreshed. "Thou visitest the earth, and waterest it: thou greatly enrichest it with the river of God that is full of water."

During the continuance of the drought, the horses of the moon have been so tormented as to indicate a wet moon, though it proved dry.

Mean temperature of June.	69.33
do do. of July.	68.51
The Barometer has varied but little from 29.5 inches, indicating regular weather.	C. DEWEY.
Rochester, July 31st, 1811.	

Hints for the Month.

Farmers should remember that weeds continue to grow throughout the season, and that efforts to destroy them should not be now relaxed. Corn and potatoes should still be kept clear of them. It will not only be of essential benefit to the present crop, but save a vast amount of labor in future seasons. Ruta bagas, carrots, and mangrel wurtzels, need constant attention in this particular.

But perhaps the greatest evil from suffering weeds to grow, is the bad habit it leads to. Good order and neatness should be studied and carried out on all occasions; and every cultivator should become alarmed whenever he finds himself growing easy under careless management.

Care should be taken not to sow weeds. Seed wheat should be thoroughly cleaned, and nothing left but the pure grain; chaff and cockle may be removed from it by a good fanning mill, and by washing in brine.

It should be a standing practice to improve all kinds of farm crops by selecting the best seed. The best portions of the field should be chosen, and, if prac-

table, the finest heads picked singly from the sheaves for the growth of future seed. The same course should be pursued with corn and other crops. Every one knows that animals are improved on a similar principle, and vegetable productions may doubtless be equally so.

Weeds growing in pastures need care to prevent their spreading by seed. Their rapid increase in Western New York shows a wretched neglect. Fields in which, five years ago, the Canada thistles, Johnswort, and ox-eye daisy, had just obtained an entrance, are now completely overrun with these weeds. A tenth part of the expense they have indirectly occasioned, would have extirpated the whole of them long ago. When the worst comes to the worst, farmers must attend to this subject, though a hundred times the labor may be then needed that would do the business now.

Those who cannot afford to destroy spreading weeds, should remember the miller who would not pay a dollar to fill the musk-rat hole in his dam; the second day the current had enlarged it, and he would then have gladly paid that sum, but it would cost five dollars; and the third day he was compelled to pay fifty, or lose all.

Garden seeds require collecting as fast as they become ripe. The best way is to cut off the stems, which hold the ripened seeds, and tie them in bundles, until they can be conveniently cleaned. Where seeds are not fully ripe, a large portion of stems attached, will often afford nourishment enough to complete the process.

This is the best season of the year to haul peaches. Apples and pears may be easily budded, if done early in the month. Success in the adhering of the bud, depends chiefly on the thriftiness of the stock, so that the bark may separate very freely. Peach buds which adhere well are often destroyed by the succeeding winter and perish the following spring. To avoid this, select buds from the oldest part of the shoot whence they are taken, and be especially careful to procure the strongest and thriftiest shoots.

Before concluding, we wish to direct enterprising farmers to what we have already published, in late numbers, on subsoil ploughing. The season for sowing wheat will soon be at hand, and we are confident a great improvement will be made in our crops by this practice. One fact in confirmation:—A neighbor had dug a ditch through his field, several feet in width and depth; the subsoil, thus removed, was spread to the depth of about two feet on the adjoining ground. This season, when the drought was such that the wheat in the rest of that field, did not promise five bushels to the acre, that portion on each side of the ditch on which the subsoil was deposited in a deep bed, indicated a product of more than twenty bushels to the acre. The soil was a loam, not so heavy as ever to become cloddy or bake from tenacity.

cause, we know not; but we should estimate them

cause, we know not; but we should estimate them at not more than one-tenth of what usually appear in other seasons. We have not had opportunities to shoot half a dozen.

The *crow* however, made some predatory demonstrations; but on our stretching aloft two pieces of twine between some of the trees, they suddenly discovered they had no further business in that quarter.

The manner in which ornithologists occasionally speak of the characters of different birds, is amusing. According to Nuttall, the *crow* is a "troublesome," "gormandizing," "voracious," "audacious," "piratical," "pilaging," "guilty," "inquisitive," and "formidable;" while to the *cedar bird* is ascribed "gentleness of disposition," and "innocence of character," besides being entitled to the adjectives, "friendly, useful, and innocent." Now all the charges that we have selected against the *crow*, apply as well to the *cedar bird*, with the exception of two; and "innocent" as he is made to appear, the same facts committed by some other bipeds (without feathers however) would entitle them to a lodging in the country jail.

It is often extremely difficult to determine the true name from the books, when two varieties are much alike. The time of ripening is an important characteristic; but as this will vary with the climate as well as with the season, the most exact way to fix this point, would be to compare the ripening of the variety under examination, with that of some well known sort.—Unfortunately, pomologists have generally chosen the May Duke for this purpose—the most unfit of all the cherry tribe that we have ever seen; for it goes on ripening and to ripen for several weeks in succession. All such references are but of little value.

Our young trees have made us acquainted this season with *three* more fine varieties of the cherry. The first is the *Elton* which Lindley calls "very excellent," and which ripens with the Black Corone. Niel says "it is distinguished by the extraordinary length of the fruit-stalks;" and so we have found it, after comparing it with seven or eight other varieties, all of which have shorter stalks. The fruit is large, a waxen yellow, mottled or shaded with red next the sun. We think it will become a general favorite.

Another kind has been called the *Black Eagle*: but Lindley represents the genuine sort as ripening at "the end of July or beginning of August" in England, while ours ripens with the Elton, "the beginning or middle of July" in that country. He continues: "the spurs of the Black Eagle produce bunches of ten or twelve cherries each"; but ours were mostly single. Again: "juice very rich and high flavored"; but ours, though sweet and rich, and much admired, could scarcely be entitled to that epithet. Another *fact*: however, may throw more light on the subject.

The third sort is the Elkhorn—a very remarkable variety. We agree with Prince that it is one of the largest black cherries that we have ever seen, and when fully ripe a superior fruit, as it then loses most of its bitterness. It is very firm, and must be fine for transportation or culinary purposes. †

For the New Gentile Farmer.
My own Experience.

Messrs. Editors—Last year was my first attempt at farming. I commenced by subscribing for

the New Guineese Farmer, and Albany Cultivator. By these valuable papers, every number of which is worth three times its cost, I learned that Canada Thistles, of which I had a very promising crop, could be effectually subdued, by repeated ploughings. Accordingly I commenced about the first of June, and

I planted one bushel of Rohan potatoes, and raised seventy bushels; four acres of corn, and harvested two hundred; sowed ten bushels of wheat, and shall not harvest any. So much for the first year.

From the Farmer's Gazette.

With many persons, the discovery is yet to be made, that a super-abundance of water is as detrimental to the growth of most plants, as a stinted supply of this fluid. They admire that elevated lands should be wet; the reason is, they do not look deep enough,—if they did, they would discover that the soil of most of our ridges rests upon a sub soil which is very tenacious, and as impervious to water, as a dish; consequently there is no way by which the water falling upon the surface can escape, except by the slow process of its way through the soil to some less elevated place, and by evaporation, except it is by the ditch, or other covered or open. My tendency is rather the former. After recommending a system, the inference will be that I have derived some benefit from it. I answer in the affirmative, and will state briefly my experiments.

Again, I have a field of ten acres, in which I have made one hundred and fifty rods. This lot had always been occupied for grazing; some part of it was so wet (made so from springs) as to produce but little, and by far the greater part of a kind of knot grass, which indicates the coldest of land: will only *keep* animals, but not fatten them. The ditches had so favorable an effect that I determined to put the lot under the plough,—that being my intention from the beginning, provided I could drain it. I have had two crops from it, and my experience is, that those parts of the lot, which were the most wet, have become the best. I have the driest, and the soonest fit to plough after a rain, and producing the best crop. It would surprise any one to witness the quantity of water discharged, and that it is not interrupted in the coldest weather.

Now as to the size and expense of making. That will vary according to circumstances. I have made mine two feet wide, from eighteen to twenty-four inches deep. The depth, however, is to be determined by the nature of the ground, and the kind of water to be drawn off. If surface water, when you meet the obstruction, (hard pan), that is sufficient; if spring, deeper cutting may be necessary. The most expeditious way of filling the ditches is to dump the stones; it is but the best way, and the most economical. I have been in the habit of hiring a hand, leaving an aperture or four feet in the ditch, square just as the stone ceased to favor. As to cost, I calculated twenty-five cents a rod; this is what I pay for digging and stoning. The drawing the stones I count nothing, as they can be disposed of in that way at a less expense than to draw them into the highways, or to some distant ledge or broken

* We allude to Lydgate's account of the London riots (about the year 1150) where he mentions "cherries in the ruse." "*Ruse*," says the New Edinburgh Encyclopedist, "is a word not yet obsolete in Scotland, signifying spray or twigs."

piece of ground. The drawing the dirt on after placing the stones, is so quick done, that it need not enter into the expense.

The ditch should not be filled nearer than within six inches of the surface. Sticks or straw should be laid on the stones previous to replacing the dirt. The quantity of water to be d. charged, and the stones upon the land, will influence as to width and depth of the ditch.

I have made my article longer than I had intended when I began to write. I am not ambitious to make a display of my farmings, but to elicit attention to, and promote agricultural interests. R. H.

Danbury, May 3, 1841.

From the London Mark Lane Express.

On Making Ponds.

SIR—Observing one of your correspondents to be making an inquiry as to a method of making ponds, I take the liberty of sending you, for his information, the method practical some time ago by Mr. R. Herbert Gardiner, of Kildham, in the East Riding of Yorkshire.

Let a circle be marked on the ground six feet in diameter—more or less as the person chooses, or the size of the pasture may require a supply of water—and if of that diameter, let it be hollowed out into the shape of a basin, or bowl, to the depth of seven feet in the centre; when the surface of this hollow has been raked smooth, let it be well beaten over, so as to reduce it into an even, uniform and firm surface, as the nature of the ground will admit of; on this, well shacked and screened lime must be uniformly spread with a riddle, to the thickness of two or three inches; the more porous or even the ground, the greater will be the quantity of lime required; this lime then must be slightly watered, to make it adhere firmly to the place, and great care must be taken to spread it equally, so that no place may remain uncovered—as on the lime depends, more than any thing else, the success of the work. On this lime must be laid a bed of clay, to about the thickness of six inches, which being moistened sufficiently to render it ductile, is to be beaten with mallets or beetles, into a compact solid body, capable of being trodden upon without impression or injury. Great care is to be taken in laying on this mass of clay uniformly, and beating it into a compact body; for this purpose no more must be spread at one time upon the lime than can be worked in the beating, while it retains a proper temper or consistence for the purpose; after the whole is thus finished, it is gone over several times with the beaters, and sprinkled each time with water, and care is taken to prevent any cracks being formed, which might entirely destroy the power of retention.

Pure brick clay is not required in particular, but any tenacious earth; that by beating will become a solid compact body, will answer the purpose. As soon as this operation has been duly performed, the whole surface of the clay is covered, to about the thickness of a foot, with broken chalk, fine gravel, or the chippings of moulding shale, or any material to prevent any injury being done by the treading of cattle.—It is necessary to observe, that coarse stones ought not to be made use of, as they are liable to be displaced by the treading of cattle. They are also liable to be pressed into or through the clay, or to be rolled down to the bottom of the pond; under all which circumstances, the beds of lime and clay are liable to be broken, and the water consequently let out of the pond. Sometimes the clay is covered with soda, the grass seed being laid downward as a sowing to the gravel, by which some saving of the covering may be made; or a covering of earth may be used, where gravel and such like are scarce. After the clay has been well beaten, some workmen throw the surface of it, and fold sheep or pigs, or a considerable time upon it—the treading of which is found to be serviceable in rendering it more compact.

The best season for making these ponds, is thought to be in autumn, as they are then likely to be filled the soonest, and the least liable to crack before they are filled. Should the weather prove dry at the time they are finished, it is well to cover the surface with straw, or litter, to hinder them from cracking.

These ponds are usually made at the foot of some declivity where, after heavy rains, water may run into them from the road, but many are placed without any such assistance, it being found that the rain which falls upon their surface is in general sufficient for a supply, after they have been once filled; for this purpose snow is sometimes collected and heaped upon them the first winter after they are finished. One of the size above given, he says, may be executed for

about £15, and will contain above 700 hog-heads of water. One of forty-five feet in diameter, by five in depth in the centre, will contain about 300 hog-heads, and may be executed for about £12. This is a vast supply in a small space. The water thus preserved is of an excellent quality, when not injured by the cattle.

Much might be said upon the excellence of this plan, but I will refrain from trespassing upon your valuable columns, by giving my observations of my own, thinking they may be unavailing for.

I am, Sir, your obedient servant,

YEOMAN OF KENT.

Keep your Land Dry.

The importance of draining is not duly appreciated, nor its practice well understood, among us. Although water is indispensable to vegetation, too much of it is as hurtful as too little. It is necessary to the germination of the seed, to the decomposition of the vegetable matter in the soil, to the transmission of the food from the soil to the plant, to its circulation there, and to the maturity of the product. All these useful purposes are defeated, where water remains in the soil to excess—the seed rots, the vegetable matter which should serve as the food of the crop, remains undecomposed, in consequence of the absence of heat and air, which the water excludes; or, if the seed grows, the plant is sickly, for want of its proper food, and there is consequently a virtual failure in the harvest.—It is not from the surface only we are to determine whether land is sufficiently dry to sustain a healthy vegetation; but we are to examine the surface stratum, into which the roots of the plants penetrate, from which they draw their food. If this is indurated by wet—if it grows marshy plants—if water will collect in a hole sunk fifteen inches below the surface—the land is too wet for cultivated crops, and means should be adopted to render it more dry. From my partial acquaintance with this country, I feel assured that much of your best land is rendered unfit for tillage, or the growth of the finer grasses, by reason of the excess of water, which seeps or reposes upon the subsoil unnoticed by the cultivator. These lands are denominated cold and sour, and they truly are so.—Cold sour lands are invariably wet lands below, if not upon the surface. But if from superfluous water were judiciously conducted off by efficient underground drains (for the construction of which, you possess the best materials in abundance), these lands would be rendered warm and sweet, and highly productive; and the outlay would be repaid by the increased value of two or three of the first crops. Wet lands are generally rich lands, abounding in vegetable matters, which water has preserved from decomposition, but which readily become the food of plants, when the water is drawn off. Let me imagine a case, which I am sure will be found to exist in many parts of your country. There is a slope of a little hill, half a mile in extent, terminating in a flat forty rods wide, through which a brook meanders. The soil on this slope, and in this flat is of a light porous quality, six to twelve inches deep, reposing on a subsoil impervious to water, as clay, rock or hardpan. By soil, I mean the upper stratum, in which vegetable matters are blended with earthy materials, and which constitute the true pasture of plants. Near the top of this slope, all along on a horizontal level, or perhaps lower down, epouts or springs burst through the subsoil, a thing very common in hilly districts, the waters from which finding an easy passage through the loose soil, spread and run down the slope, and upon the subsoil and through the flat, till they find their level in the brook.

A thermometer plunged down to the subsoil, will indicate, at midsummer, a temperature probably not greater than 65° whereas to grow and mature many of our best farm crops, we require a heat in the soil of 70° or 80°. How shall we remedy this evil, and render this land profitable to the occupant? Simply by making an underdrain or drains, in a gently inclining direction: a little below these epouts or springs, and, if practicable, somewhat into the subsoil. These will catch and conduct off the seeping waters, and by laying the lower plane dry and permeable to heat and air, develop all its natural powers of fertility.

I will suppose another case—that of a flat surface, underlaid by an impervious subsoil. This is rendered unproductive, or difficult to manage, by stagnant waters. The rain and snow waters, penetrating the soil, are arrested in their downward passage, by the subsoil, which not having slope to pass them off, they here remain and stagnate, and putrify, alike prejudicial to vegetable and animal health. The mode of draining such grounds, and of rendering them productive and of easy management, is first to surround

the field with a good underdrain and to construct a sufficient open drain from the outlay to carry off the waters. Then with the plough, throw the land into ridges of twenty to thirty feet in breadth, according to the tendency of the soil, in the direction of the slope, and sink an underdrain in each of the furrows between the ridges, terminating them in the lower cross drain. The underdrains of the underdrains, which are generally stones, should be laid so low as to admit of the free passage of the plough over them. The superfluous water, by the laws of gravitation, settle into these drains, and pass off and the soil becomes dry, manageable and productive. An acquaintance called upon a Scotch farmer whose farm had been underdrained in this way, and being informed that the improvement cost sixteen dollars an acre, tile having been used, remarked that this was a costly improvement. "Yes," was the farmer's reply, "but it cost a deal more *not to do it*," which he illustrated by pointing to an adjoining farm, like situated, which had not been drained, and was overgrown with rushes and with sedge grass, and then to his own fields teeming with luxuriance and rich in the indications of an abundant harvest.

I have dwelt upon the subject of draining with more detail, because I have personally realized its benefits, and am sure it may be extensively gone into with certain prospect of reward.—*Judge Bad.*

For the New Gleaner Farmer.

Scraps of Information. LIVER COMPLAINT.

MESSES. EDITORS—Barley is an old medicine for the cure of liver complaints. In the countries west of the Allegheny mountains, animals are particularly subject to such complaints, especially hogs. Repeated experiments have shown, that if they are fed with a proportion of barley while fattening—say one-third or one-half barley—their livers, when they are killed, will be found free of any defect or unsoundness; whereas, if they are fattened upon corn or other articles, such as are generally used, a sound liver can rarely be found. In order to produce this effect, it is best to feed the barley without cooking it—boiling it will lessen its medicinal properties.

DEAD SHEEP.

If the wool of dead sheep is not wanted for stockings, it should be shorn off from them instead of being picked off. If shorn off, it can be sorted by the manufacturers, and will be purchased by them at its fair value. It is also a great saving of labor.

STRETCHES, OR COSTIVENESS OF SHEEP.

This complaint frequently arises from dry hay becoming consolidated in their stomachs.

CURE.—To half a pint of yeast add half a pint of lukewarm water, and, from a bottle, turn it down the sheep's throat. Dose it in this manner once in two or three hours, until relieved.

This medicine operates by dissolving the contents of the bowels by fermentation, and will generally operate when all other medicines fail—it is a cooling and safe remedy. Doses of two or three quarts should be given to oxen and cows afflicted with dry murrain, which is similar to the complaint among sheep.

Potatoes.—Sheep are not fond of Potato tops, especially when they are full grown, or getting old—therefore, if your potatoe patch becomes too grassy or weedy, either before or after hocking, turn in your sheep, and they will shortly eat down the grass and weeds—only be careful to turn them out as soon as they have finished the grass and weeds.

HOGS IN PASTURES.

I have conversed with many farmers upon the subject of letting hogs in upon pasture ground, and I find upon inquiry that a majority are in favor of letting old hogs in upon pasture ground, and think that they add to the quantity of pasture without injuring the quality. My own impression is the reverse of this—but I find so many large farmers against me that I should be pleased if you would inquire into this subject and notice it in your paper.

Ohio, July, 1841.

COMMUNICATOR.

The Flowers of Summer.

Since our last article on flowers was written, we have seen the *Mahoe rose* in its glory; and when its tall stems are properly supported by a trellis, its dark flowers make a fine display. The *Caroline rose* is well adapted to the same treatment.

The *Greville rose* stands on the south side of a board fence; and with no other protection, it has endured the winter without damage. The flowers varying from pure white to almost red purple, even in the same panicle, present a pleasing contrast of colors.

At different times, we had procured trees of *Magnolia glauca* but they could not endure the sun in the open border, though the soil had been enriched for the purpose. Accident, rather than judgment however, induced us to try one on the north side of a board fence; and it has grown finely, producing this season, for the first time, two of its white fragrant flowers. Sand with a large portion of muck from the woods, constitutes the soil.

Our purple *Chinese Magnolia*, mentioned at page 84, (where its specific name should have been printed *obovata*) two or three years ago shewed in its yellow leaves that it was suffering from an ungenial soil; and we procured *sour earth*—such as corn would windmill in, from the northern part of Seneca county. This material was applied three or four inches thick to the bare roots, and covered up with the soil that had been removed to give it place. In a few weeks the leaves assumed a deeper green; and two of those shrubs, which have been transplanted in this way, might now be chosen as samples of a healthy vegetation.

Verbascum speciosum grows six or seven feet high, and appears to be perennial. The stem supports more than fifty lateral branches, crowded with flowers of a golden yellow which in the morning beam are uncommonly brilliant. In the afternoon it seems to fade, the flowers contracting or falling off; and in the evening it is nearly bereft of beauty. In the morning it is again renewed; and continues to bloom in this manner for a long time.

The double white *Campanula persicifolia* has blossomed with us for the first time, and equals our expectation. This species in its foliage as well as its flowers, is among the most elegant of that wide spreading genus.

Yucca flaccida was mentioned last year; and remains to be a favorite. Its large white flowers continue long in bloom; and its leaves which are abundant and more than a foot in length, are as green in winter as in summer.

Severe as the drought has been, *Baccharis cordata* disregards it; and from a deep sacitious soil, sends up stems seven or eight feet high. The light bluish of its petals before they open, which though small, are exceedingly numerous, is very conspicuous and pleasing.

Macrotis racemosa, degraded in some districts under the name of Black Snake Root, is much admired for its delicate white flowers. Where it is rare, and no prejudice exists, it appears to great advantage.

Hydrangea quercifolia, from the far south, has endured another winter, and retained enough of vitality to come finely into bloom. The branches even above the snow, were not destroyed, though impaired in their vigor; but under the snow it is secure from all injury by frost.

The dwarf Horsechestnut (*Fesculus macrostachyon*) five feet high, but flat topped and spreading wide, has numerous panicles resembling spikes, projecting above the leaves, each nearly a foot in length, crowded with white flowers, and reddish anthers on long filaments. It combines delicacy with splendor.

A year ago we grafted the rose-flowering Locust (*Robinia hispida*) on the common kind, because the former was not adapted to our soil. It flowered the first season, this year it has grown finely, and is now in bloom. Some have spoken discouragingly of its duration, but so far it has done well.

The Fruit Garden.

The general introduction of fruit gardens among the freeholders of this district, would go far towards revolutionizing public sentiment on the subject of petty theft—at least of one kind. People who have grown up in the practice of taking whatever they could lay their hands on in the shape of fruit when the country was new, have in too many instances trained up their children in the same licentious habits. Steal? no, but they—out of a neighbor's deck or cupboard; but they would plunder him of the just reward of his toil (melons, plums, or peaches,) and glory in their wickedness. They would not rob a hen-roost—that would be too mean; but they would rob the tree where the hens roosted, of every thing else that was valuable.

A sprinkling of depravity has fallen on every neighborhood—on some heavier than on others; but we think there are predators who would alter their course, if the case could be clearly presented to their view; especially those who have any thing of their own. The boy who owns a melon patch and has to guard it, will be not much disposed to plunder his neighbors. A fellow feeling strengthens his virtue. His mind, in grasping the arguments that show his own rights, perceives that they apply with equal force to his neighbors, and he learns to respect them.

By way of illustration let us suppose a case. B and C owning village lots devote them to different crops. B plants no trees—trees cost money, and years may pass away before they come into full bearing. He is satisfied with the kitchen garden, and its cabbages, onions and potatoes; while C looking further ahead without neglecting his immediate wants, is preparing to have the cherry, apricot, plum, peach, pear and apple, and in process of time he is rewarded for his expenditure, toil, and care. Now the whole subject of begging or plundering fruit, turns on one question: Has B any more right to C's peaches than C has to B's cabbages? Let them barter, or let them buy; but the honest and honorable who have duly considered the subject, can put in no other claim, and apply on no other condition.

It has long been a general custom throughout the country with them that have fruit, to share it with their neighbors; and in many instances to keep the smallest share for themselves. It has not been because the proprietor wished to have it so, but because he was not prepared to assert his rights in opposition to a public sentiment generally expressed. He did not wish to be called stingy, and therefore calmly, though reluctantly, submitted to be plundered.

Before we planted our fruit garden, but while we were contemplating the subject, we became satisfied that a new stand must be taken—that we must assert and stand by the assertion, that the fruit was exclusively ours—to use it, to sell it, or to give it away, to whom we pleased, and to nobody else; and as we knew that some singularities may be indulged in, without impairing a person's character, we determined to try the experiment. We therefore laid down the rule *Not to give fruit to them that ask for it*, subject to such exceptions however, as might be right and proper; and we have found it to work well. It is the only way to make a fruit garden worth having; and we would strongly recommend it to every proprietor who wishes to enjoy the fruit of his own labor.

A Basket of Cherries.

Every body has eaten cherries; the common red, "sour enough to make a pig squeal," is the companion of every farm house. What a pity that we should rest satisfied with this miserable apology for a very superior class of fruits!

I have just had the privilege of tasting several kinds received from the garden of our friend D. Thomas, and beg leave to communicate somewhat of my enjoyments and conclusions, to those readers of the "Farmer," who are as uninformed as I have hitherto been, on this subject.

First, I was introduced to the "Early Richmond;" pretty fair thought I, as I drew down the corners of my eyes—sugar enough added to its rich, though not high flavored pulp, would give as good pies before we had any thing else. "Transparent Guigra" rich and high flavored, not quite sweet enough to suit my taste. "White Tartarian" a very fine delicious cherry, no one would say "hold, enough," with a dish of this fruit before him. By this time, I began to think "D. T." must have a very fine collection, and felt a good deal like stopping by the way in company with the good friends mentioned above, but finally concluded to join hands with the "Carnation;" for size and beauty of appearance this cherry has few rivals; its skin is sufficiently capacious to hold half a dozen of the common red (if snugly stowed) and then its complexion so beautifully mottled! who could refuse eating it? I did not try; and although some charge it with having a bitterish taste, I did not hesitate to say, that no prudent man would refuse it a place in his garden. There was a bunch on my right hand, which in my eagerness I had almost overlooked, it was the "Black Tartarian," for many years considered as standing without a rival, and when I state that it is thought very small unless three fourths of an inch in diameter, and that its juice, pulp, flavor, and bearing qualities are in proportion to its size; perhaps my readers will say as the boys do, "N. C." (null ced.) Animated with my success, I now determined to push my discoveries farther, and seized upon a long, black, rakish looking fellow called "Elkhorn," and by making "two bites," succeeded in dividing it; not that it was tough, by any means, but it justified Prince's description in "being sufficiently hard to carry to market." This quality was not very pleasant at first, but after repeated trials we found that a most delicate sweetness was left in the mouth, which even the remembrance of the one previously described could not extinguish. In this opinion, my wife (who in my estimation at least, is no unwise judge of these matters) entirely concurs.

One more, the "Elton"—and lest I should tax the patience and credulity of those who have read thus far I will briefly say that it is a new cherry, a cross between the Yellow Spanish and the White Heart, and taking all things together "we ne'er shall see its like again." In this opinion I am borne out by those best qualified to judge. It is not to be understood that all the kinds spoken of ripen at the same time, but with a few of them there is much inequality, some being ready for the table, while others on the same tree are quite green.

W. R. SMITH.

Macedon, 7th mo. 23, 1841.

The Curculio shut out.

A cultivator of fruit informs us, that soon after the flowering season, wishing to preserve some fine specimens of a fine plum, he made bags, "of that thin stuff, you know," said he, "that women make caps of," and inclosed portions of the bearing branches. The result is, that those portions are thickly covered with fair untouched fruit, while it has entirely fallen, in consequence of the attacks of the Curculio, from the rest of the tree.

A Visit to Mr. Sheffer's Farm (in Whentland).

It affords us much pleasure to publish the following account of the operations of our friend Sheffer. Farmers would find it greatly to their advantage to visit each other more frequently; and we wish our friends would often send us their observations on the management and success of their neighbors. Mr. Sheffer is a plain hardworking every-day farmer, enjoying no greater advantages than are possessed by thousands of others in our land.—Eus.

For the New Genesee Farmer.

MESSRS. EDITORS.—In making a visit to our townsmen, George Sheffer, last week, I was so well pleased with what I saw of his management, that I am induced to send you a short sketch of my observations.

Mr. Sheffer's farm consists of 360 acres, and has been in the possession of the family 51 years. It is situated a little below the mouth of Allen Creek, and is part of the farm that was purchased of Indian Allen, so called. About two-thirds of the land is Genesee flats, the remainder undulating oak land.

In stock, Mr. S. is doing a fair business, with cattle, sheep and hogs. His cows, (of the native mixed breeds,) cannot probably be excelled in Western New-York; and his other cattle are also fine. He has a thorough bred Durham bull, pure white; and a full blood Devon bull. He is this year breeding from the latter. In his pasture I saw a pair of young horses, of the Sir Isaac stock, very large and fine. Of sheep, he has some of the improved Leicester and some of the Merino breed; both kept distinct. He gives the Leicesters the preference, and says the greater quantity of wool they afford, will more than make up for the lesser price; besides, they are one-third better for mutton. He said nothing of the difference in feed; and if that was taken into the account, I think the balance might lie in favor of the Merinos. His hogs are of the Leicestershire breed, with a small cross of the Byfield. He has 63 one-year-old store hogs, wintered mostly on cooked roots. (Potatoes and Mangle Wurtzels we presume. Eus.) They are now running in the clover pasture, with about the same number of pigs, all in fine condition. He kept his hogs in close pens through the winter, and thus made 100 loads of first rate manure which he applied to the land for his root crops. (I am of the opinion that he might improve on his pig management, by feeding boiled corn with his roots; and if he had it ground and slightly fermented it would be still better.)

In wheat growing, Mr. S. is not behind his neighbors. He has 110 acres, mostly extra-fine, for this season. Some on the flat was injured by the winter and the high water this spring, and is consequently quite thin; but it is not filled with cockle or chaff, as some of the readers and correspondents of the Farmer might suppose; on the contrary, not a stalk of cockle could be seen, and in going more than 200 rods around and through his wheat, I only found one solitary root of chaff, and that he said was chargeable to me, for I furnished him the seed. If the advocates of transmutation would take a walk through his wheat, I think their faith would be somewhat shaken; for here, if any where, is the place for wheat to turn to chaff; when it has been severely frozen, and covered with water.

Of Corn, he has 17 acres, planted on sward land, turned over and well harrowed, (after being covered with manure.) This crop looks remarkably well, and if the weather proves favorable will afford a great yield. In passing through it, I could not discover any pumpkin vines, and was informed by Mr. S. they would not grow in the shade, where the corn was so thick.

He has 27 acres of Oats, a part of which are on the land where his root crops were raised last year, and are very heavy. The remainder are on sward land turned over, rolled and harrowed in; these did fair to afford a good yield. He observed that if oats did not fetch three shillings a bushel, he fed them out.

Of Barley, he has about 10 acres, half of the six-rowed, and half of the two-rowed kind. He gives the latter the preference.

In Root Culture Mr. Sheffer is quite at home, and is operating with a mastery hand. His long, straight rows of Beets, Carrots, Potatoes, and Ruta Bagas, are a sight worth seeing. He has nine acres of potatoes planted in drills, manured in the rows, of the Roban, Mercor, and Ox-Noble or large pink-eye varieties. He expects they will average four hundred bushels per acre. Next are two acres of Mangel Wurtzel, in rows twenty-seven inches apart, and the plants from six to nine inches apart in the row. Then two acres of Sugar Beets, three acres of Carrots, and four acres of Ruta Bagas, all in similar rows and all looking very even and thrifty. With ruta bagas he is very successful. He is very liberal with seed, using three pounds to the acre. The amount of labor expended upon the root crops, including preparing the land, seeding, thinning, and twice dressing has averaged about ten days work per acre.

In taking a peep into his garden I found another sight that but few farmers can exhibit. A good assortment of vegetable luxuries, all thriving in their proper places, and free from weeds. His melon vines were so fine that I enquired his mode of culture; and was informed that he first opened a trench about two feet wide and one deep; this is filled two-thirds full of hog manure and the other third a little rounding with river sand, on which the seed is planted.

The cider mill is but little used. With his large orchard, Mr. Sheffer only made three or four barrels of cider the past year, and that was used for vinegar and apple-sauce. No spirituous liquors are used on his farm. The apples are mostly fed to stock.

Lost, though not least, I took great pleasure in viewing the Apiary. Mr. S. has 16 swarms of bees in Week's Vermont hives; with the boxes or drawers filled or nearly filled with fine white honey, and the little workers busily stowing away their treasures for the owner, who says, Go on, industrious bee; I will only take what you can well spare from your store. With these hives the honey can be taken at any time without destroying or disturbing the bees.

Respectfully, yours,

RAWSON HARMON, JR.

Whentland, Monroe Co. July 17, 1841.

Berkshire Hogs.

A. C. Blackwell, of Round Grove, Mo., requests "a full description of the never-varying flesh marks of Berkshire hogs," adding that there are a great many imported into that State as Berkshires, some white with black spots, others black with white feet, face, and the tip of their tails. He wishes the necessary information to prevent imposition on himself and many other subscribers. We hope some one, properly informed in this particular, will give the necessary information in our next number; just observing at present, that a very large portion of the Berkshires now in this country are of the color our correspondent speaks of,—black, with white face, feet, and tail tip, (not exactly nine white hairs in the tail, as some have humorously and sarcastically said;) some others are spotted; and some are even noticed on the most respectable authority, as being white. We consider the shape, not the color, as the distinguishing feature, and as this cannot be easily described by words, we must either refer our correspondent to some well executed portraits, which we have rarely seen ourselves, or to

what is far better, to the living specimen, obtained from some honest and competent importer and raiser of the breed. We hope to see something more satisfactory from some of our correspondents under this head next month.

For the New Genesee Farmer.

Sugar Beets Plough Late and Plant Early.

MESSRS. EDITORS.—Finding that some of our best Farmers had abandoned root culture, I inquired the reasons: "A putting business—hired men won't work at it," "an increase don't pay the maling," &c.

Now if the time employed in digging, and picking up small potatoes in the fall was spent in hauling long manure on to a single acre of ground and ploughing it under, this acre would be ready early in the spring for sugar beets with harrowing only. Plant as early as the ground is dry enough, thin out and transplant as soon as the beets are three or four inches high, and by the first July some of the beets will measure five or six inches in circumference. I admit that if a piece of ground is left ploughed in the spring and planted just before the droughts of summer commence, that the culture of beets will prove a putting business, and the increase will not pay the maling.

SENECA.

Waterloo, July 18, 1841.

P. S.—I have now sugar beets in my garden, sown and transplanted in May, that will now measure four inches in diameter above the ground—heavy clay soil. S.

For the New Genesee Farmer.

Wheat Culture.

MESSRS. EDITORS.—Having been a reader of the Old and of the New Genesee Farmer from their first establishment, I have observed that some branches of agriculture have been much neglected, while others of minor importance have received their full share of attention. I refer to our great staple wheat, as one of the much neglected, yet one that interests us more in this vicinity than all others. Now why it is so often so many repeated calls, I leave for others to say, and propose to break the ice on this subject by briefly giving you the results of my experience.

The field contained six acres of land, principally occupied with Canada thistles, and on which a Florida war had been waged for twenty-five years or more, with little prospect of success or termination, costing, as is always the case, all that was obtained.

In 1837, in the latter part of May, I broke it up, and drew on it about one hundred and eighty loads of manure. I ploughed the ground deep four times, and harrowed it as often, in the heat of summer. From the tenth to the fifteenth of September, I spread the manure on the ground, sowed the wheat at the rate of one bushel and a peck per acre, and ploughed it in, and then passed over it lengthwise with a light harrow. The result was, that I killed three instead of two birds with one stone, for I harvested three hundred and forty-one dozen sheaves, a part of which being thrashed by itself, gave one bushel to eleven and a half sheaves. The wheat was the red chaff bald, and the soil was a black loam with a subsoil of clay. Proof of the above can be furnished if needed.

In the above piece it cost me but little more than other fields of similar size, I received about twice as many bushels of wheat, killed the Canada thistles, and my ground is in good condition for after-cropping.

AUGUSTUS D. AYERS.

Romulus, June 26, 1841.

Pig Sale.—J. Lossing of Albany has sold a Berkshire boar and sow, the former for \$200, and the latter for \$300, to W. P. Curd of Kentucky. The boar with his ears weighed 280 lbs.

For the New Genesee Farmer.

Inflammable Gas exhaled by Flowers.

MESSRS. EDITORS.—Having recently tried some experiments on the *Dietamnus rubra*, or Red Flaxinell, I have thought it desirable to communicate the result of the same through the medium of the Farmer.

The *Dietamnus rubra* (and *alba*) is one of our most hardy herbaceous perennial plants, and is universally admired, not only for its great beauty, but also for its peculiar fragrance. Its bright leaves, its erect position, its long spikes of fine flowers, cannot fail to attract the attention of the most casual observer.

In some nursery catalogues it is stated that this plant exhales an inflammable gas; yet probably but few persons have tried any experiments to test this peculiar property of this plant. A few days since, having several of these plants in full bloom, and it is only when in full bloom that they appear to emit the strongest odour, I repaired to the garden in the evening to try the experiment. On applying a lighted candle to the base of the spike of flowers, it instantly exploded, and in a moment the whole flower was enveloped in a blaze. On applying the candle to the top of the flower, it had no effect. When applied half way down, the gas only above that point would explode, but none below; and thus the explosion was only complete when the torch was applied to the base of the stem or flower.

I also tried the same experiment on the *Dietamnus alba*, which produced similar results, only that the quantity of gas emitted from this plant appeared to be much less than that emitted from the *rubra*. The explosion is something like that produced from the ignition of a small quantity of gunpowder; yet it produces no injury to the flowers.

B. HODGE.

Buffalo Nursery, June, 1841.

For the New Genesee Farmer.

Best Time for Cutting Timber.

TO THE EDITORS.—Your article in a recent number of the Farmer, under the above caption, is on an important subject, and contains some valuable suggestions. I coincide with you in opinion that the summer is the best time for cutting timber; but not that every period of the summer is equally good. In the early part of the season the flow of sap is so abundant, that the retention of the juices in the pores of the timber is liable to produce fermentation, and consequently, premature decay. If there be a period when the circulation is almost inactive—when the sap scarcely ceases to flow and the bark to run—it appears to me that reason would designate that as the most proper time to perform the work. The qualities of the sap, instead of being watery and abundant, as is the case early in the summer, will have become concentrated and viscid; and instead of hastening decay, will no doubt contribute to durability.

That there is such a period, is a well known fact. It occurs in the month of August, a few days earlier or later, according to circumstances, but generally from the 15th to the 20th, and continues only for a very limited time. If the weather is dry, its continuance may be somewhat longer. Persons who are in the habit of inoculating fruit trees, select the period of the autumnal flow of sap, which is from the 1st to the 10th of September, as the most eligible for propagating some species.

I have frequently had timber cut in August, and I can certify that the wood is very compact and solid. It has a different appearance from that cut in winter—looking and feeling as if it had been oiled. My own experience does not extend farther back than ten or twelve years; but I have known, and could cite, a number of cases of remarkable durability, when the

timber has been cut according to the old Dutch rule, in the dark of the moon in August,—which is as near the exact time, as any person, relying on lunar influence, could approximate to it; and every third year the rules might very nearly correspond.

The period mentioned, appears to constitute something of a crisis in almost all vegetation of a ligneous character. The simple belling of a tree, will so effectually destroy vitality, that not a sprout will ever shoot up from the roots or stump. It is the only time at which I have ever even partially succeeded in subduing the "round cap" (*Cephalanthus occidentalis*) which infests our meadows and flat grounds, and which grows from the smallest section of a root. I eradicated it entirely, by a single operation, so that there was scarcely a vestige of it for several years afterwards.

Close observation is necessary, to enable one to designate the precise time when the work should be performed. The moment to begin, is when the bark is found to adhere closely to the wood. T. S. P.

Virginia, 6 mo. 20, 1841.

The Hessian Fly.

Extract from remarks on the Hessian Fly, read before the Calhoun County (Michigan) Agricultural Society, by the president, Judge HICKS.

GENTLEMEN.—We have a fine climate, less subject to high winds, to sudden changes from cold to hot, from too much wetness to drought, from deep snow to bare ground, than is enjoyed in the east. The soil of this country is for the most part a sandy or gravelly loam, rain soon subsides in the earth, while the great proportion of lime it contains, secures the crop against the dangers of excessive dryness. It is easily cultivated, and its ingredients are exactly adapted for the production of wheat and for grazing; two branches of business which should always enter into our system of Agriculture.

But we labor under two embarrassments: the one which is of paramount importance to all others, because it is the nursing mother of all of them, is the want of such a market for our produce as will induce us, by its profitability, to cultivate our farms as to have at least one half or two-thirds of our lands in grain while the others are under the operation of the plow. In practice, this will be found impracticable, especially where the price of Agricultural produce is low, and the wages of our labor are high.

The second embarrassment arises from the prevalence of the Hessian Fly, which has the last season destroyed, it is believed, more than two-thirds of the wheat crop in this country. This formidable insect was first discovered on Long Island, about sixty years ago, and was supposed to have been brought from Germany in a ship which transported the Hessian Army to Long Island during the Revolutionary War. It has, however, been well ascertained that the insect is indigenous in the United States.

From the best accounts we have been able to obtain of the Hessian Fly, it chooses for its prey the weak stunted plants. In this respect it resembles most other insect depredators, who prefer to make their repasts on the delicate aneural juice of plants of a stunted growth. It is a voracious, and usually deposits its eggs in the gutter on the upper leaves, and in some instances on the under as well as the upper sides. In four or five days the eggs hatch, and the caterpillars crawl down the lent to its intersection with the stalk, where they may be found beneath the sheath, so minute as scarcely to be seen by the naked eye. This insect has two generations in a year, distinctly marked, although in scattered instances it may be found in all its various states of existence, from April to October. First generation. In spring, the eggs are laid in the latter end of April or beginning of May, and are hatched, and the caterpillars appear in May. In the latter end of May, or the first of June, they change to the chrysalis or flax seed state; or harvest a part of the chrysalis are carried off the field with the grain, but most of them remain in the stubble in their original nest at the intersection of the lent with the stalk. The latter end of July or first of August, they take wings and deposit their eggs the latter end of August and in September. Second generation. In a few days after the eggs are laid, they are hatched, and the caterpillars pass into the chrysalis or flax seed state in October, and in this state they remain during winter, and appear with wings and lay their eggs the latter end of April or beginning of May.

"The fly is not found, or at least rarely, on lands that are subject to early and late frosts, such as our prairies, or the high lands on the head waters of our streams. But it would seem that the other parts of the State must be particularly subject to its ravages, and that there is no variety of wheat that can long resist this formidable enemy."

Prevention.—The preventives which are most likely to be efficient, are, not to sow until October; in the spring of the year, soon after the fly has deposited its eggs, while the plants are wet with rain or dew, sow the wheat field with castor oil, or feed down the wheat close to the ground, by a drove of cattle, or what is better, by a flock of sheep, sufficiently large to perform the operation in a few days—not to sow a field of wheat adjoining one from which a crop has been recently taken—plough under wheat stubble in autumn to destroy all the voluntary wheat plants that may appear on the stubble ground before October, by the use of a drag or in some other way, and cultivate land in the best manner, so as to have no weak or stunted plants.

Rotation of crops a preventive.—But all this trouble to guard against the Hessian Fly may be saved by the introduction of a proper system of rotation of crops. A strict adherence to the true principles of husbandry admits, nevertheless, of a considerable variation.—Western Farmer.

Important Discovery—Destroying Insects.

We enhance the earliest moment, after the receipt of the following letter, to lay it before our readers. The season is not yet so far advanced that the process may not be beneficial to those who put it in operation: M. P. WILDER, Esq., President of the Massachusetts Horticultural Society:

Sir.—Having discovered a cheap and effectual mode of destroying the *Rose Stag*, I wish to become a competitor for the premium offered by the Massachusetts Horticultural Society. After very many satisfactory experiments with the following substance, I am convinced it will destroy the above insect, in either of the states in which it appears on the plant, as the fly, when it is laying its eggs, or the slug when it is committing its depredations on the foliage.

WHALE OIL SOAP, dissolved at the rate of two pounds to fifteen gallons of water. I have used it stronger without injury to the plants, but find this more mixture effectual in the destruction of the insect. As I find, from experience, there is a difference in the strength of the soap, it will be better for persons using it to try it diluted as above, and if it does not kill the insect, add a little more soap, with caution. In corresponding with Messrs. Downer, Austin & Co., on the difference in its appearance, they say—"Whale Oil Soap varies much in its relative strength, the article not being made as Soap, but being formed in our process of bleaching oil. When it is of very sharp taste, and dark appearance, the alkali predominates, and when light colored and flat taste, the grease predominates." The former I have generally used, but have tried the light colored, and find it equally effectual, but requiring a little more soap—say two pounds to thirteen gallons of water.

Mode of preparation. Take whatever quantity of soap you wish to prepare, and dissolve it in boiling water, about one quart to a pound; in this way strain it through a fine wire or hair sieve, which takes out the dirt, and prevents its stopping the valve of the engine or the nose of the syringe; then add cold water to make it the proper strength; apply it to the rose-bush with a band engine or syringe, with as much force as is practicable, and be sure that every part of the leaves is well saturated with the liquid. What falls to the ground in application, will do good in destroying the worms and curdling the soil, and from its trilling cost, it can be used with profusion. A hogshead of 136 gallons costs forty-five cents—net weight four mills per gallon. Early in the morning, or in the evening, is the proper time to apply it to the plants.

As there are many other troublesome and destructive insects the above preparation will destroy as effectually as the rose slug, it may be of benefit to the community to know the different kinds upon which I have tried it with success.

The Thrips, often called the Vine Fretter, a small, light colored or spotted fly, quick in motion, which in some places are making the rose bush nearly as bad in appearance as the effects of the slug. *Aphis*, or Plant Louse, under the name of green or brown fly, an insect not quick in motion, very abundant, and destructive to, the young shoots of the Rose; the

Peach tree, and many other plants. The *Black Fly*, a very troublesome and destructive insect, that infests the young shoots of the Cherry and the Snow Ball tree. I have never known any positive cure for the effect of this insect until this time. Two varieties of insects that are destructive to, and very much distress Evergreens, the Balsam or Balm of Gilead Fir in particular, one an Aphis, the other very much like the rose bug, The *Acarus*, or red spider, that will kill many pest to gardeners.

The *Disease Mitten* on the Gooseberry, Peach, Grape Vine, &c., &c., is checked and entirely destroyed by a weak dressing of the solution.

The above insects are generally all destroyed by one application, if properly applied to all parts of the foliage. The eggs of most insects continue to hatch in rotation, during their season. To keep the plants perfectly clean, it will be necessary to dress them two or three times.

The *Canker Worm*. As the trees on this place are not troubled with this worm, I have not had an opportunity of trying experiments by dressing the trees, but have collected the worms, which are killed by being touched with the liquid. The expense of labor and engines for dressing large trees, to be efficient, may be more than the application of it will warrant; but I think by entangling the ground under the trees with the liquid, about the time the insect changes from the chrysalis state and ascends the trees, will destroy them; or, when the moth is on the tree, before laying its eggs, they may be destroyed without much labor; in either case, the mixture may be applied much longer than when it comes in contact with the foliage. Laying it on the trunk and branches of the tree, at the consistency of thick paint, destroys the brown, scaly insect on the bark, and gives the tree a smooth, glossy, and healthy appearance.—N. E. Farmer. DAVID HAGERSTON.

Waterloo, June 19th, 1841.

From the American Farmer.

The Rose-Bug.

This little insect wherever it is known at all, is known to be extremely destructive to some other flowers as well as the rose, and is sometimes so numerous as to destroy all the early cherries, the hawthorns, the grapes, and sometimes the more delicate varieties of the peach. Many years ago I have often lost all these fruits except some of the varieties of the peach by these insects. Of late years they have done me little or no injury, and they are nearly exterminated from my premises—they are only to be seen at the places of their destruction—these are *Linden trees when in blossom*. When these trees first begin to bloom about my yard and garden, at one of them over a hard naked wall, I was surprised to find the rose-bug, which had been vastly numerous and destructive for many years before, dead in great quantities under it—as many as a pint or quart might be swept up under it at a time dead. My first impression was, that the bugs died about the linden tree after depositing their eggs and terminating their natural career, but such is not the fact, and I now speak with confidence after several years observation and experience when I say, the blossom of this tree destroys them, and will exterminate, or nearly so, the race from its immediate vicinity, on the farm on which they grow. This fact seems to be out of the ordinary course of nature, for we are taught to believe that all animals in a natural state are led by the wise instinct of nature to avoid that which will poison or destroy them. In rushing into the enjoyment of the delicious fragrance and honey of this flower, they precipitate themselves on their own destruction.

I state this fact, for the information of florists and fruiters, and hope that those better skilled in philosophy and natural history, may solve the seeming heterodoxy. T. E.

No End to Improvement.

He that believes agriculture is perfect, and that we have nothing to do but pursue the old and beaten track, called ancient's ways round the tread mill, deserves our compassion. Nature proclaims that neither agriculture, nor any other branch of natural science, can ever become perfect. The mind of man is capable of indefinite improvement, so are all the productions of nature. For examples, look at the valuable plants in the condition in which they were first found in their native woods. The various kinds of corn, potatoes, cabbages, fruits, &c., were all, before they were touched by the finger of culture, as unlike what they now are, as different species are unlike. They are all susceptible of continual improvement, all ever running into new varieties. It is not long ago, that

the potato was a useless, unwhitely vegetable in the woods of South America, where it was first found, but it has been so changed by the hand of enterprised industry, as to become large and healthy, and now supplies food for more human beings throughout the earth than any plant, save corn and rice, and is no doubt destined to be as much future improvement as it has received in the past. Compare the maize or Indian corn, as first seen in the feeble stalk and slender roasting ear around the wigwag, with its hundred varieties in its present maturity, yielding in value as countless thousands to national wealth. And we are just now beginning to see the improvement of which this valuable plant is still susceptible.

The succession of the seasons—the calm—the storm—the course of the winds—the revolution of the heavenly bodies—the nature of the earth—the food of plants—the influence of water, light, heat and air on the growth of vegetation—the proper composition of the various soils to furnish the greatest amount of production, will ever be subjects too broad for the full grasp of the most profound philosophers, and in the untamable profundities of which, new discoveries will be made as long as the frame of nature shall endure.—No. Farmer.

Humbug.

Almost every year gives birth to some new word, or some new and peculiar meaning to the old word, in the English, or rather American, language,—so that there will be a need of dictionary makers and new lexicons as long as the Anglo Saxon race exists. In the political vocabulary, the introduction and permanent use of new terms, has become *very common*. Take, for instance, the word “*guy-rigger*”—an entirely original one, which was invented in the days of Gov. Gerry, or the words “*tawdler*,” “*loco-foco*,” and the like, which have obtained a political significance, that until lately, were unknown in the English language; are not such terms evidence of the lexicographical genius of our political fellow citizens? The word “*humbug*,” is another term which, of late years, has assumed a new significance; and for the harmless insect that hums its merry music in the nocturnal atmosphere, has come, rather, to signify whatever in politics, religion, science, agriculture or the arts, deceives the people by promising much and performing little. And so now, whatever does not come fully up to what was promised, or rather what was expected by a misanthropic of the pretension, is humorously designated as a humbug. There is danger that we may go too far in this unceremoniously bestowing opprobrious terms upon every thing that does not meet our expectations. By such a premature course, we may often do real injustice to men who are engaged in great improvements. Their inventions and improvements may at first not fulfil all the expectations which were raised; still they may be of some value and ultimately prove of great service when the full design is completed; at least their motives and intentions are good, and should receive the charity, rather than the unmeasured censure of the public.

Take, for instance, the experiments that are made and the suggestions which are offered, relating to Agriculture. No improvements can be had without experiments. It is not to be expected that all should succeed. But what then shall more be made? Some may be partially successful—leaving room for still further improvement; others may be perfect at once. Now a person who thinks he has made, and actually has made some improvement, publishes the results of his experiments, under the influence of that partiality which is always bestowed on one's own offspring, and an expectation is therefore raised, in less partial minds which is not fully sustained—though there may be improvement—it is fair or generous to denounce the whole as a “*humbug*,” and its author as a base man and deceiver? We think not. Some how or other, whatever gets in print, some readers are apt to look upon as having a consequence—that authorizes higher expectations than if the same thing had come to them in precisely the same words, from the lips of a neighbor. Exorbitant expectations, in this case, are the fault of the reader, rather than the writer; and if disappointment follows, the blame is not altogether on one side.

We make these remarks now in relation to two articles in agriculture, which we notice many persons are disposed of, off hand, to denounce as “*humbugs*,” because expectations have been raised, either through the faults of readers, who ascribe an undue importance to what appears in print, or to the writers who under the influence of a parental partiality have described them. We allude to the *Rohan potatoes* and the *China Tree Corn*.

For ourselves, individually, there was always something from the first and earliest descriptions which we saw, that led us to doubt whether the *Rohans* were much better potatoes or greater yielders than the long reds; but so we never recommended or said much about them—not choosing to make any experiments, or to give the results of them to the public. But these are called a “*humbug*.” Wherefore? Do they not yield largely? They do. Very largely? They do. So much that is gained. Are they not better than many other potatoes for cooking? They were never pretended that they were. On the contrary, it was always said, they were not very good for culinary uses, and were more appropriate for stock. In this, then, there was no deception. Call them “*humbug*,” if you will; nevertheless they are great yielders; and if it so happened that we in Maine have another sort, not thus made conspicuous before the public by accounts of them, which yield as much—the good luck is ours—no one is injured by the *Rohans*. Why then should such terrible judgments be decreed against the New Yorkers who produced and complimented a new kind that yields so well in that state. People here were anxious to try them. The seed stores were called upon to procure them. They did so to oblige customers. Purchasers bought one or two each and tried them. If they did not find them the best potatoes in Maine, and the greatest yielders ever seen, why should the seed stores be blamed for enabling them to try the experiment?

And now of the *China Tree Corn*. We can speak more experimentally of this. We tried the experiment on a liberal scale, not for our own, but for the public benefit, and gave the result of our operations to the world—just as they were. So that others had the knowledge at our cost. We never said that the *China Tree Corn* was adapted to our latitude. That was a point to be ascertained. We found out that it is not, and we told the public so.

It should be recollected that Thorburn from whom the seed was obtained, resides in the city of New York. His crop was raised on Long Island. His descriptions of its capacities related to that latitude. He never said it would flourish and ripen in Maine; and if we choose to try the experiment here we must do it at our risk, and if it failed, not blame the corn for what it could do in the Middle States, but could not do in Maine or in Canada. We have no doubt that it is a very early corn for that latitude; and that what Thorburn said of it is mainly true, so far as relates to the region where he raised it, which was the place of its descriptions. He never said that it grew like trees bearing ears on branches. This was an emendation made by the copyist of some secular editor, for whose description Thorburn was not responsible. The truth is, it is a tremendous great corn, it grows like a forest, and will yield, in climates suit, if you like, beyond any corn we ever saw. This we proved by actual experiment. The year we planted as we did on a large scale, the season was dry and wet. It did not have a fair chance with still fearful as the odds were against us, having been raised three or four hundred bushels of us, the most of it did ripen. Last year it came from our own seed, and that we long and long before any frosts. We were yet, that it may not be acclimated and that it may not be acclimated in its native State—for it will exhaust the land at a rate, natural where a great crop is yielded.

People may call it a “*humbug*,” but it is no humbug in New York; for we very frequently see accounts in the journals of those states, setting various places of its successful cultivation and yield. We ought not, in New York to flourish here, which is *ad nauseam*.

People brought it here from curiosity, and this curiosity our seed stores took on sale. But who was really injured in an hundred bought even a few cost the capital sum of twenty five procured but a few kernels at a price. This expense, therefore, could not be injury to any one, and certainly not lost by its occurrence with the plant; the opportunity to try the experiment, did without injury to themselves. If it failed—well; if they were not, let them try if they had been imposed upon and robbed of a summer's work, and their farm to boot. It is well, try experiments, though they fail sometimes.—*Maine Cultivator*.



ROCHESTER, AUGUST, 1841.

Apologies and Promises.

The absence of the managing editor during the past month, must serve as an excuse for any defects that may appear in this number of our paper. For the same reason we have not yet completed the new arrangements alluded to in our last. We can assure our readers, however, that such measures are in progress as cannot fail to give them increased satisfaction. A new Power Press will be procured expressly for this work, and a better quality of paper will be obtained, so as to improve its appearance and secure punctuality. More attention will be paid to the editorial department than heretofore, and more aid is expected from valuable correspondents—so much for this time. Now have patience with us readers; and see if we do not perform all that we have promised, and more too, before many months.

The Fair at Syracuse.

Our readers will not forget the State Agricultural Fair to be held at Syracuse on the 23rd and 30th of next month (Sept.) The place selected is a good one, and articles for exhibition can be transported there with little risk or expense. We trust the farmers of Western New York will do themselves credit on the occasion. For list of premiums, &c. see last month—further particulars hereafter.

Monroe County Agricultural Society Notice.

The Officers and Town Committees of this Society will please remember the meeting on the 26th August. The town Committees are expected to make their reports at that time, and arrangements are to be made for the coming exhibition.

COUNTY AGRICULTURAL SOCIETIES.

Notices of the formation of a goodly number of county societies have appeared during the past month, but having absent till almost our day of publication we are unable to mention them that attention we could wish, and some interest till next month. We intend to publish the societies in the State, and give the names and time of holding the fairs, in the counties.

Albany County.

Organized at Auburn, July 22, 1841. A and the following persons appointed.

Edward, Leysard.

M. Sherwood, Auburn; Loring Bell, Buffalo; L. M. Hollister, D. O. Durkee, Ira; Wm. Watkins Hutchinson, Genoa; J. Bell, Mendon; Isaac Sisson, Wasco; Jonathan Richmond, Waco; John W. McElderry, Waco; Matthias Vanderheyden, U. P. Donnelly, Springville; Springville, Merwin

Richardson, Auburn. J. C. Beardsley, Auburn.

Johnkins, Auburn; Thomas Smith; Silas Dunley, Catskill; Daniel Phelps, Ira; Elijah Durbin, Genoa; Isaac Cady, Mr. Sherman, Lockport; White, Leysard; Joseph Cooper, Sterling; William V. Victory; Wm. Webster, John Kooks, Niles; Peter Varsell, Summerhill.

Constitution.

of connecting himself with Treasurer fifty cents at the first, and one dollar annually from day and Thursday following. Any disconnection as a member. Any admission may become a member wishing to withdraw from dues and give a written notice of his intention.

§ 5 There shall be an annual meeting of the Society on the 24th Wednesday and Thursday following in October, at Auburn, or at such place as the Board of Managers shall direct for the purpose of holding the regular Fair and exhibition of domestic animals, manufactures, and articles, the produce of the farm.

The Officers of the Society are requested to meet at the American Hotel, at Auburn, on the 12th day of August, at 11 o'clock, A. M.

Seneca County.

An Agricultural Society for this county was formed at Fayette on the 29th of June, 1841. The following persons were appointed Officers:

PRESIDENT—C. V. Sackett, Seneca Falls. Vice Presidents—Dr. John L. Lawrence, Lodi; George Woodworth, Cawett; Andrew Dunlap, Jr., Ovid; Elijah Denton, Romulus; Thomas Burroughs, Varick; Dr. Oakley, Fayette; Joel W. Brown, Waterloo; Silas Vanderburgh, James; Jason Smith, Tupper; Denning Boardman, Seneca Falls.

RECORDING SECRETARY—A. B. Dunlap, Ovid. CORRESPONDING SECRETARY—Samuel Williams, Waterloo.

TREASURER—John H. Gray, Romulus.

TOWN COMMITTEES—Dr. Folwell, G. Miller, John Lefferts, Lodi; Judge Woodworth, Tupper; Boardman, Jewett; Hapley, Cawett; William Alexander, Woodworth; James Sturtevant, Ovid; C. J. Smith, John Keane, Col. Folwell, Romulus; Tunis Day, John A. Christopher, Orange; Wilkinson, Varick; John King, Augusta Reading; Jacob Peterson, Fayette; William S. Bell, Highland; George James Stevenson, Jr., Waterloo; Chas. Perry, George Van Clee, Henry Powers, Seneca Falls; Thomas M. Gee, Lisk, Ovid; Samuel, Alexander H. Nichols, Tupper; Israel Lisk, Ovid; Samuel, A. H. Birdsey, Auburn.

Art. II. (of the Constitution.) Any person may become a member of this society, by paying into its treasury fifty cents on admission, and fifty cents annually thereafter, or before the annual meeting, during his continuance as a member. Any person paying five dollars on admission may become a member for five years.

The list of premiums, &c., will be published in the "Ovid Bee."

Erle County.

A meeting was held at Buffalo, on the 22d of July, to organize an Agricultural Society—Henry Johnson of Lancaster, in the chair, and August Viles, of Aurora, Secretary. Horace S. Turner, Benj. Hoag, Jr., Alex. Hitehcock, John Webster, and Palmer Boyce, were appointed a Committee to report a Constitution and Bye-Laws, at the next meeting, to be held at the Court House in Buffalo, on Saturday, August 11th. **Advised, Farmers?**

Niagara County.

This society was organized at Lockport, June—. The officers are:

William Parsons, President. John Gould, Jr., C. H. Skeels, Vice Presidents. D. S. Craighill, Corresponding Secretary. Joseph M. Colburn, Recording Secretary. Wm. O. Brown, Treasurer. Other parties not met at hand.

Livingston County.

A meeting was held at Geneva, and a Society formed about a month since, but the particulars have been mislaid in our absence—will give them next month. We again repeat our request that the Secretaries will send us accounts of the formation and proceedings of societies.

What is doing in Wayne, Orleans, Chautauque, and several other counties in Western New York, not heard from.

To the Officers of the Cayuga County Agricultural Society.

GENTLEMEN:—It will be seen by reference to the proceedings of the meeting held on the 22d inst., for the purpose of organizing an Agricultural Society for the county of Cayuga, that by Resolution, notice was given that a meeting of the Officers of the Society will be held on the 13th day of August next, to carry out the objects of the Society.

At this meeting all necessary Bye-Laws, Rules and Regulations will be framed and adopted to carry into full effect the design of the Association. It will be the imperative duty of every Officer, President, Vice President and Committee member, to be punctually present at this meeting. Too much pains cannot be taken in laying the foundation of the Society, for on this depend the durability and usefulness of the superstructure.

All the officers residing in the several towns in the county, should immediately make individual efforts to obtain members of the society, and if any such should be obtained, their names should be handed to the Recording Secretary, and the amount of their subscriptions should be deposited in the hands of the Treasurer, at the above mentioned meeting of the Officers.

From the spirit manifested at the meeting on the 22d inst., and the high character of the persons interested (myself out of the question,) I have not the least doubt that this cause will be eminently successful. Let no man be discouraged on the ground that a former

experiment of the kind, some 20 years since, has been tried and proved a failure; because the present circumstances under much more favorable auspices. The liberal bounty of the State, the increased wealth and enterprise of the agriculturists of the County at the present time are sure guarantees of its success.

The advantages to be derived from this Society, will be increased wealth, multiplied produce of the soil, a vast improvement to all kinds of stock, enhanced health and comfort from fruit-yards and ornamental shrubbery, and a new impulse to moral and intellectual improvement, and the meetings of the Society, the addresses delivered on such occasions, the awarding of premiums, and the novelty and beauty of the annual fairs will be sources of national amusement, highly calculated to take the place of other amusements of a more dissipated character.

WM. RICHARDSON,

Auburn, July 26, 1841. Rec. Sec'y of C. A. S.

New York State Agricultural Society.

The regular meeting of the Executive Committee of the New York State Agricultural Society for June, was held at the Troy House, in Troy, on the 16th inst.—President in the Chair.

Letters were read from Messrs. H. S. Randall, H. Munson, John H. Beach, Charles F. Johnson, A. Bergen and Jacob Burrows.

New members were admitted to the Society. Mr. Tucker introduced the following resolutions, which were unanimously adopted:

1. Resolved, That the Corresponding Secretary be authorized and requested to open correspondence with such individuals as he may deem proper, in the several counties of our State, for the purpose of eliciting information on the following points:

The present condition of Agriculture in each County, with such changes as have already taken place since the period of their first settlement—Aspect of the county—Nature of the soil—What are the principal products?—Where are the products marketed?—What kinds of cultivation are in use?—What are the favorite breeds of horses, cattle, sheep, swine, &c.? How are the stock generally fattened for market? What ploughs, harrows, and other agricultural implements are in general use? What is the general value of the land? What kind of timber generally prevails? What agricultural changes are requisite to advance the prosperity of the county?

2. Resolved, That the Corresponding Secretary be authorized and requested to open correspondence with such individuals as he may deem proper, for the purpose of eliciting information on

The most profitable breeds of cattle, sheep, horses, swine, &c., for our country—the best and most economical method of rearing them—Their diseases and the method of treating them—The most profitable varieties and the best method of cultivating the several species of grains and roots—The best and most profitable method of making butter and cheese—the most economical method of fattening domestic animals—The best and most economical method of wintering domestic animals—The cultivation of fruit—Horticulture—the most profitable Grasses—Drainage—Rotation in crops—Manures—Diseases of plants, and the remedies—Destruction of noxious weeds, &c.—Construction and management of farm out buildings, yards, &c.—Fences.

3. Resolved, That the Corresponding Secretary be authorized and requested to open correspondence with such individuals as he may deem proper, in the United States and Europe, for the purpose of eliciting information on such agricultural subjects as may be of value to the farmers of our State.

4. Resolved, That the Finance Committee be requested to address a Circular to the friends of Agriculture in this State, setting forth the importance of the objects for which the New York State Agricultural Society was formed—its inability to accomplish those objects without the aid of the farmers and the friends of agricultural improvements generally, and the urgent necessity of an appeal to them to extend their aid to the Society by connecting themselves with it, either as annual or life members, or by contributors in aid of its funds.

Mr. B. Bennett laid before the Committee a communication from Solon Robinson, Esq., in relation to a convention to be held at Washington, to form a National Agricultural Society; whereupon,

Resolved, That the object is one of paramount importance, and the executive committee earnestly recommend it to the friendly consideration of the members of the New York State Agricultural Society.

Slugs on Fruit Trees.

MISS. EDITOR—About the first of July there appeared on the leaves of pear trees in this vicinity, a small dark brown worm or slug, from one quarter of an inch to an inch in length, with head much larger than any other part of the body, and in numbers as to threaten the trees with immediate destruction. Half a dozen of them might often be seen feeding on a single leaf, eating out the tender part like young silk worms. They increased in numbers for about two weeks, and then extended their ravages to the cherry trees, but I believe no other kinds were injured by them. After continuing their work of destruction for about three weeks, and stripping many trees entirely of their foliage, they began to die and have now mostly disappeared. Now as I am entirely ignorant of the name, origin and history of these insects, I write this communication in hopes that you or some of your correspondents will throw some light on the subject.

A. B. C.

Boothfield, July 26th, 1841.

REMARKS—These slugs, as they are commonly called, have been quite too well known in this vicinity for three or four years past. We are not sure that their operations are confined to Western New York, although we do not recollect seeing even or heard of them in other parts. It is evident, however, that they are every year extending the field of their operations, and they will probably continue to do so some natural calamity destroys, or enemy devours them; however simple may be the artificial means for their destruction, it seems that people are generally too idle or negligent to put them in requisition. We last year published several articles on the subject, and suggested some means for their destruction (Vol. 1.)

The insect appears to be a *hondrescript*: or at any rate we have been unable to find out its true name, or any account of its history. We have discovered, however, that in its first state it is a fly, about as long and half as large as the common house fly, but of slower motion. It deposits its eggs during the month of June, which appear like small glutinous scales on the upper surface of the leaves. These hatch and produce the slugs, which feed for about two weeks—then curl up and appear to die and fall to the ground. But instead of dying as most people suppose, they underground into the chrysalis state and creep into the ground, where they remain till the next summer, and then issue again in the form of flies—multiply their species, and renew their mischief.

The most common and simple mode of destroying them, therefore, has been to throw dry ashes or lime over the trees for several successive mornings. It adheres to their body and kills them. If any of our readers have discovered any more easy or effectual method we should be pleased to publish it.—Eios.

Downing's Landscape Gardening and Rural Architecture."

The appearance of this work at the present time, ours, on the part of the Publishers, great confidence in the intelligence and good taste of our countrymen. Inhabiting a region but recently made subject to the ravages of civilization, it is a matter of course that our eyes and thoughts should be chiefly occupied with that which pertains to the necessities rather than the elegancies of life. We were, consequently, not without fears, that our art or had mistaken his own zeal for a high estimate of rural improvement, for a somewhat corresponding feeling in the community, and therefore, like many other writers of merit, his labors would remain unappreciated, until a more refined public sentiment should do them justice.

But we are mistaken; and if the plea of ignorance for more credit to our honesty than information, all we can say is, that it is very gratifying to find the prevailing taste in advance of our anticipations.

We knew indeed that huge piles of brick and stone had been erected in the vicinity of our cities and large towns, with some pretensions at least, to care and labor in planting about them; but we were not aware how much had been done remote from these, far from the busy haunts of commercial life, to catch the inspiration of Nature, and make her beauties subservient to our comfort and elevated enjoyment.

We had often feasted upon the works of foreign authors as they described the magnificent country

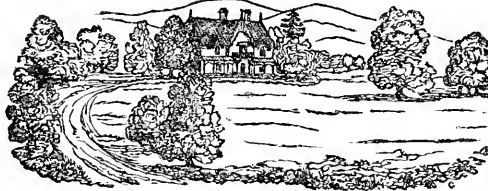
seats of the old world; but we knew not that the noble Hudson reflected from its silvery waters the lofty and graceful tracery, the pointed arch and the lofty pinnacles of the Gothic style; or that the warm and rich Italian, transported from its sunny home, had found an appropriate resting place on the quiet banks of the Delaware. But what has given us more satisfaction than all, and for which we think our author deserves much credit, is, his attempt to bring this species of enjoyment within the reach of every landholder, however humble. Republicans, as we are by feeling and education, we hope never to see the day when lordly castles, extensive parks, snatched from cultivation, and highly artificial and costly gardens, shall take the place of the elegant, but unostentatious villa, the well kept farm house, or the neat and comfortable cottage. The former how beautiful soever in appearance, constantly force the reflection upon us, that toil and privation are wrung from the many, for the gratification of the few. It is partly on this account, that an impression seems to prevail, unfavorable to ornamental planting, as being attended with heavy expense: hence also, when a wealthy individual, wishes to improve his grounds, he thinks his object secured by the application of large sums of money; he changes a gentle slope into huge terraces, lays out his approach road in a regular curve, racks his invention to produce a fence of the most showy description; and if, behind these, rises a stunted, staring front of composite columns, his success is complete. After all this he looks for enjoyment, and wonders why it does not come; never reflecting that the mind derives its chief satisfaction from the contemplation of Nature in her varied, ever-changing forms. Let him then when he seeks enjoyment in this particular, keep his purse strings undrawn, except to the calls of the poor and the needy; but let him with his own hands smooth and enrich the verdant turf; let him in this low corner, plant the bending willow; on that knoll, the graceful, towering elm; lead the circuitous path through this close planted grove, the dark maple and the shelving beech invite

us by their refreshing coolness; here, open to view the distant prospect; there, shut out by thick undergrowth an unsightly object; here, in an irregular plot, suited perhaps to the bend of the walk, plant a few delicate flowers; and near by if possible divert the neighboring rivulet to gladden and complete the whole: Then our word for it, there will be no complaint of summer. This would be a world within itself which would afford more of variety than all the architectural display of the city. But some of our readers are ready to say, perhaps, "all this is very well for the wealthy, but when shall we find time to accomplish a work so extensive? We reply, in the first place, we should be glad if there was a *little* more attention given to the *comforts* of life, and not quite so much exclusive thought, in relation to getting rich. And in the second place, let every man strictly conform to his circumstances, and if his front and back yards occupy but a few rods of ground, why let him improve them in the best manner. Is it absolutely necessary that the lawn gate opens *precisely* in front of the principal door? May we not have some reference to convenience? and must the straight walk be bordered with flowers in a straight line, and the whole area occupied with parallel rows of trees? In fact it is common to find places arranged in this manner which have required quite as much labor, as to have laid out the grounds in a simple and effective form.

We copy below as illustrating our meaning in part, an engraving, representing a plantation of the simplest description: let our readers observe the close planting near the house, the wide spread lawn and the graceful curve of the approach road, then let them in imagination cover the whole with straight rows of fruit trees, shut out the best prospects, if accident decide, and lead the approach in a direct line to the house, and then mark the difference.

We hope in future numbers to give our readers a synopsis of the work, as we conceive the information contained therein to be intimately connected with the real happiness of the community.

S.



ITEMS

CONDENSED FROM EXCHANGE PAPERS, &c.

New Pasture for Cows—*Morus Mutilicatus*.

The American Farmer says "In a recent conversation with a friend from Virginia, he informed us that he had tried the experiment of turning his cows into the field where his mulberries were growing, and found that they ate the leaves with great relish, and that the increase in the quantity and quality of the milk was perceptible in a day or two." Should like to know how many cows an acre would pasture.

Silk Culture.—Edmund Morris of Burlington, N. J. announces the entire success of his experiments the present season in the culture of silk, by means of his newly invented silk frames. His experiments were performed in the presence of crowds of visitors, and several testimonials are given of the complete success of his frames in other places. Those wishing further information may have it by reading his "Silk Record," a small monthly, sent to all without charge, who are personally interested in the silk business.

Hen's Eggs.—A correspondent of the Cultivator says he obtains fresh eggs the year through, by regularly feeding his fowls as much Indian corn as they will eat.

A Berkshire Hog in the possession of E. Marks, Onondaga county, gained, while fattening, three pounds five ounces daily.

Working soil, according to Skinner of the American Farmer, is "the sovereign thing" to prevent plants burning from drought.

Two Rules of Jefferson are very applicable to the times:—"Never spend your money before you get it;" and "Never buy what you do not want because it is cheap."

Large Yearlings.—S. Ilcox of Lyons, writes, in the Cultivator, that he has two bull calves, reared from Thomas Weddle's stock of Durlams, the one a three-quarter blood, which weighed at one year old 1015 lbs., the other a half-blood, which at the same age weighed 915 lbs. Their feed during the past winter was hay and roots only.

"Durham Cows as Milkers."

We have no desire to prejudice the minds of our readers either for or against any particular breed of animals; but as the conductors of an agricultural journal, we conceive it to be our duty to publish such facts and opinions, on both sides of disputed questions, as will enable our readers to decide intelligently for themselves. With this view, we inserted in our April number, the remarks of H. COLMAN on the milking qualities of Durham Cows, and finding in the Albany Cultivator a reply to those remarks by L. F. ALLEN, we now publish the substance of his opinions on this subject.

(Our readers will better understand the following remarks, by reading them in connection with the article on page 63.)

"In reference to paragraph No. 1, Mr. Colman, I have never seen the herd of Messrs. Lathrop, of South Haddley; but if they are what Mr. C. represents, they must be beautiful and valuable animals, and a great addition to their neighborhood; although I exceedingly regret that he did not give the opinions of those gentlemen as to their value and excellence in the Connecticut Valley, and the results of experience concerning them. A detail of their observations would have been, at least more satisfactory than a summary condemnation without a hearing.

Mr. Colman and myself visited the Ohio Company's herd, which he mentions, together in company at Buffalo in 1835, as they were passing through from the sea-board to Ohio, on their passage out. They were in high condition, as few or none of the cows were then in milk, and we had no opportunity to judge of their capabilities for the pail; although I have since learned that several of the cows were great and rich milkers. It must be understood, however, that many of the English breeders of high bred Short Horns breed only for sale and the shambles, and do not cultivate the milking qualities of their cattle. This is almost universally the case in Ohio, Kentucky, and the Western States, where the dairy forms a part of the farming business, and stock is reared mostly for beef; but from the universal tendency of the true Short Horns to excel in milking properties, when appropriated to that purpose, I can have no doubt they would show as advantageously over the pail as in the stall. When it is considered also, that owing to their severity and high value in America, all the females are employed in rearing their calves, and the bulls, instead of being converted into stores for the shambles, are preserved as stock getters, it is evident that comparatively but few examples can be adduced of their real superiority over the common and improved country milkers. Still, a sufficient number of specimens have been shown, both in milk and beef, to demonstrate that in each of these qualities the improved Short Horns have excelled all that has yet been produced of our native American stock.

In paragraph No. 2, Mr. C. remarks, that he wants proof of the milking qualities of the Short Horns. His own, seven in number, proved inferior milkers, although he admits that several of them, either of his own or which he had seen, were large milkers; but he believes these, exceptions to the general rule. That his own cows proved bad milkers, proves nothing. What was their blood? Were they of true and improved country Short Horn descent? No data is here given for us to judge of their properties in this particular, and we are forced to pass on to

Paragraph No. 3. The Cheshire and many other dairy farmers have long had an excellent stock of selected native cows, which have been propagated with particular regard to their milking properties for many generations. Mr. Colman has traversed the whole State of Massachusetts several times, and out of the whole number of cows that he has seen among many thousands, he presents a list of one hundred of the native stock which had made from twelve to fourteen pounds of butter per week. He has also challenged, both in writing and conversation, the winners of Short Horns to prove their dairy qualities.

I doubt whether one hundred thorough bred Short Horn cows can be conveniently produced at all in the whole States of New York and Massachusetts, so few are to be seen with the common stock of the country. Now, I believe we have three times that number of grade cows of half-blood and upwards, can be easily found in either State; but I will venture the assertion, that where such cattle do exist, no

matter what their parentage may be on the native side, if they were directly bred from improved Short Horn bulls, four out of every five of them have proved superior milkers; and at least twenty per cent better in the aggregate than the ordinary cows around them. And I will also assert, that of the whole number of thorough bred cows in our country, nine out of ten are excellent, if not superior milkers, and twenty-five per cent above the average native cows. To illustrate this matter, as I have bred a large number of improved Herd Book animals of the highest blood, within the last six years, as well as many grade cattle from the native, Devon, and other breeds, I will state the results of my own experience, and also the opinions of sundry other breeders, with such facts as a hasty reference will permit.

"In 1835, I bred ten or twelve half-blood heifers from three Devon and several common cows of inferior quality and appearance. They were bred by my Short Horn bull, Fawcett, and near Boston, Mass., whose pedigree will be found at No. 2, 999, 3d vol. Cote's Herd Book. These heifers proved, without an exception, good milkers; much above the average, both for quality and quantity. In 1836, 7 and 8, I bred several one-half and three-fourth blood heifers, also from Devons and others, which although many of them were sold, have, so far as I have heard from them, proved superior milkers. A part of these were sired by my Short Horn bull, Devonshire, No. 906, 2d vol. Cote's Herd Book. I also had, during the years from 1831 to near the close of 1832, a herd of full bred improved Short Horns, varying from 4 to ten milking cows, of which all, with one exception, (and that cow suffered an injury in her udder when Fawcett, and not I, was the sire.) One cow gave often thirty quarts of milk per day of good quality. Several of them gave over twenty quarts daily in summer feed, and not one of them gave poor milk, or, as the term is, milked hard. They were individually easy, pleasant milkers, with beautiful silky udders, and handsome taper teats, and were, taken together, much beyond the average run of native cows as milkers. I have now a Durham cow that has made her twelve pounds of butter per week, and of four full-bloods now in milk, every one is a superior milkers. I have also five or six half-bloods, all of which are above the average of our native cows, by twenty per cent, in their milking properties.

"To corroborate my experience, I need only mention the evidence of such gentlemen as John Hare, Parson of Philadelphia, who resided to my father that one of his full-blooded Short Horn cows had made twenty-two pounds of butter per week for several weeks in succession; Gov. Lincoln, and Messrs. Wells, Derby, and Denbigh, of Massachusetts, who have been the owners of several grade and thorough bred cows; Francis Rotch, Esq. of Butterfield, in this State, who has repeatedly testified to the superiority of his Short Horns as milkers, and to his culture experience, probably equal, if not superior, to that of any other gentleman in America, of the superiority of the Short Horns in their purity and in their grades, as milkers. I need not add the names of many other individuals who have repeatedly testified to these facts, as a reference to our agricultural papers for the last five years will corroborate all that I remark. And last of all, I will assert that Colonel Jacques' fancifully selected "Circumpat" breed of milkers, and which I saw in company with Mr. Colman himself, are simply a cross of a thorough bred Short Horn bull with a native cow, then at Colonel Jacques' farm, of good size and appearance, of a deep red color, and with an apparent dash of Devon blood in her veins. His bull that he then used was nearly or quite a thorough bred Short Horn, and all his heifers were high in that blood. This same stock of cattle, Mr. C. has himself highly recommended in one of his agricultural reports, and we are together living witnesses of the surpassing richness of the milk and cream of these beautiful cows. With a few selected facts, I will close this testimony:

In 3d vol. Cultivator, page 191, Francis Bloodgood's improved cow (she was a Durham) gave, when her calf was two weeks old, four and three and a half quarts of milk per day. Her feed was one and a half bushels of brewer's grain per day, with hay.

"In vol. 7, same work, page 132, Mr. Gower's Short Horn cow, Dorrington, for seven days gave an average of thirty-three and a half quarts per day.

"In New Genessee Farmer, vol. 1, page 143, Samuel Canby's Short Horn cow, Benson, yielded for seven days over thirty-five quarts per day, and produced thirteen and a quarter pounds good butter.

"At page 149, same vol. John Waterhull's Short Horn cow, four years old, gave from twenty-six thirty and a half quarts of milk per day, and in a week produced eleven and a half pounds of butter and in another week fifteen pounds.

"In a Philadelphia paper of 1830, "Col. Waterhull's cow, a pure Short Horn, gave, during seven days, 194 quarts, or near twenty-eight quarts per day, which produced fourteen and three-fourth pounds butter of the finest quality." So much for assertion that "Durham cows are not good milkers."

"In paragraph 4, Mr. Colman introduces us the distinguished English farmer, Mr. Sheriff, who has made the tour of this country. If this same Sheriff, who by the way I never heard of before, as profound in his remarks upon our country, its habitants and their pursuits, as the herd of English travelers who have hitherto trundled rapidly over for the purpose, as it would seem, of writing idle books and holding us up to the ridicule of English men at home, his opinion is little to be regarded. His knowledge of the progress of Short Horns in our country may be well estimated, when he remarks "that they are the poorest dairy stock in England." To this remark I need only observe, it came out of ten of the intelligent English farmers who emigrate to this country, and all British publications on the subject, assert precisely the contrary for the high grade, and often the thorough bred Short Horns, have been for many years past taking 1 place of other breeds for dairy and milking purposes in the grazing counties, and near the large towns in Essex. That he should regret the introduction of a thing tending to the ruin of our agriculture, and our wealth, is altogether natural in an English country tourist. I am only surprised that a gentleman of Mr. Colman's shrewdness should be thus easily deceived. As to the "distinct race of American cattle" to be yet formed, the end of all this is to be seen in the continual effort at blending incongruities; those experimenters who strive, without an accurate knowledge of their subject, to produce what is already better made up to their hands in the improved breeds now extant. Such experiments, as they lie and learn, have been always abandoned as impracticable and visionary. There is, nor can be, no such thing as a "distinct American breed," made up of our cattle are from sections from all parts of Europe, nor, if our agriculture is to be, as we hope, progressive in its excellence, is it desirable, or possible, that we should improve with our general agriculture. The last of Mr. C.'s remark is very just, and coincides, as we view it, the gist of what we commend.

"In paragraph 5, Mr. C. gives us the only reason why Durhams should not become the stock of New England, to wit: the poverty of its soil, and the negligence of many of the people. Truly a very broad admission, hardly just, indeed, to the snug farmers of New England, and not at all within the desiderata for which the advocates of Short Horns contend: improved husbandry, improved care, and improved stock. If, upon lands, a thousand acres of which will scarcely graze a goose, and from which the vegetation instinctively flee to escape starvation, the beautiful Short Horns are to be doomed to pin their ears, and without sympathy, I at once admit that the least of them the better. Nor do the miserable animals of the native and foreign breeds, so doomed to a wretched existence on these "barren pastures," exhibit any signs of thrift as they daily suffer from the "negligent habits of their keepers. True, a long course of neglect and starvation endure by their ancestors, and perpetuated for many generations anterior to their own existence, may render their wretchedness more tolerable than it would be of a better animal; but what advocate of any sort of improvement is content to bind himself to such hopeless sterility? Did we desire a race of animals that would starve the best, we could at once make an importation from the Shetland Islands, and establish the "American breed" that would bid defiance to neglect and poverty, and flourish amid both fire and desolation.

But this proposition is not within the category of our system. We hold, that if land be with ordinary cultivation at all, it should be at least in a reasonable state of fertility. It should yield in any event a tolerable share of its various products under good and kindly attention with which to feed well the stock of the farm. If cows are not to be decently fed, by no means keep the Durhams, or any other valuable breed. But if it be intended to give "value received," to feed well, and pay attention to your stock, and there is no other way to make any kind of stock profitable, then let the breed be as good as possible,

as high a grade in blood as the nature of your soil and the climate will permit. The admissions made before the close of this paragraph, of the enormous weights of the Durham ox with good keeping, and the full extent all that we claim, when (consequence of a ven to the animal.

In the 6th and last paragraph, Mr. C. doubts that the Durhams are, after all, not the best stock to have, and candidly admits that his mind is open to conviction. Now this, after making the admissions and denials that are above exhibited, exactly what we should expect from one of his position and pretensions. It is indeed too much in the nature of the old adage: "Honesty is the best policy." In this last paragraph all is not as it seems, that the advocates of Short Horns desire. We never asserted that they would produce great quantities of beef, or of milk, without sufficient food; would they thus under continual ill treatment, neglect and abuse; not indeed, will they bear so much neglect and ill treatment as some of our native cattle. We do fearlessly assert that either thoroughbred or grade Short Horns will produce more beef, more milk, each in their own proper time, with less quantities of grass, hay, or other proper feed, any breed of cattle ever introduced into this country; and so have they thus far done in England.

It is not to be supposed that the Durhams have never been highly kept. Our country, owing to my farm being at some few miles distance from any residence, and therefore not my daily attention, my herd always received ordinary care, and sometimes, I regret to say, not that. But I do say, that so far as my experience goes, they have from the highest bred Herd heifer, down to the lowest grade, (never less than half blood,) been as healthy and as hardy as the stock of the country, kept side by side with the opinion, therefore that Durhams are to be selected for want of hardihood or constitution, is a prejudice that is to be exploded.

I am no enthusiast in this matter. I would commend every farmer to produce into his his Durham cow. On the contrary, on very light soils, I would not introduce them; nor anything else that ever lived on a luxuriant one. I do say, on lands natural to grass, which afford a yield of pasture and of hay, where either the or the fattening of beef, or even the rearing of for sale, be the object, judging from my own experience, and corroborated by that of others who tried a single cross upon our native, or any other of cattle, no matter what, even up to high blood, the Durhams are altogether the most desirable, or, as they are called, for profit; with the exception, I think, of the Devonshire. If the climate be very dry, and they are no milkers. Were I a dairyman, I desired to grow up a race of the best and most valuable milkers, I would select the best native cows in my ranch, then obtain a thorough bred Short bull of a good milking family, and raise my cows to as high grades as in their natural course be produced, always using a thorough bred bull, no other way can the excellence and the true characteristics of the race be perpetuated. Did I however admit of any other foreign admixture, it should cross the Devon to give additional sweetness to milk; and then but a single cross, for more than would degrade the milking qualities of the herd. These animals, bred as they would be from native blood, would inherit their constitutions and habits; become identified, as much as the most ordinary, with our soils and our habits of keeping. In any should we not once gain all we desire, without injury or prejudicial change. * * *

Sugar Beet for Spring Feeding.

I have for a long time been holding various opinions, as to the value of the sugar beets as winter food for stock, and really have been puzzled with conflicting testimony of parties, for and against. I sent to a friend in an adjoining state, which I have been induced to take at the suggestion of your correspondent at p. 295 of the Cabinet for January, whom I can bear out in the remark, that such a way of expending a small sum is the cheapest and best in which a man can study the science of culture, has, however, brought me short about, a strong advocate for its cultivation, and I will tell you

before I left home, I was wondering within myself how my poor stock were to subsist another month upon a supply of fresh provender: my hay-barn and corn-crib began to show signs of atrophy, the ribs of the cattle rattling in the wind like a dried skeleton;

with scarcely a blade of grass to be seen in the pastures, into which, however, I had been compelled to turn the poor creatures, in the hope that they might be able to pick up a little help-out; knowing all the while, that what they could extract from the roots of the sod must be at the expense of the coming crop of hay. In this state of mind and feeling, I reached my friend's house, and was infinitely surprised to find him feeding all his cattle and sheep, and indeed I might add hogs, which also came in for a share, to the full head, as he termed it, with sugar beet, which he had reserved for this particular season, as a link between the winter and summer crops, the value for which purpose, to use his own words, was "quite above all price." Said he: "While many are debating about the quality of the beet, and are not able to determine whether its cultivation be the greatest good or the most considerable evil, I have gone quietly on, sowing regularly the quantity necessary for my winter consumption, being careful to preserve a full supply for the whole month of April, without regard to the stories that are told about its different and very dissimilar properties; and now you see me with plenty of food for every living thing about me for a month to come, obtained at a most trifling cost of production; for, from about an acre of land, I have raised a mountain of green food, to mix with my hay and straw, which have now become dry and hard from keeping; and by these means I am able to keep all my stock from the meadows and pasture until May—a perfectly inalienable advantage; for thus I am not only feeding them this year, but adding astonishingly to my means for the next winter, as I almost fancy that by so doing I am able to now double the quantity of hay that I used to do. And this is not all; for the large quantity and excellent quality of the manure which I thereby obtain, is of far more value to me than all the labor and expense of cultivating the beets, twice told. You see that my stock are in good condition, contented and happy, confined to their winter food, and not permitted to roam abroad, to the destruction of the fences, the loss of their dung, and the absolute annihilation of the future crops of hay; and if these are not advantages sufficient to induce me to go forward with the cultivation of the beet, I should be glad to be told what more we have a right to expect! Let others argue what is the value of such a crop for winter food, and especially for spring use, while I am too happy to be able to create a summer amongst my stock during the most dreary winter, and preserve my spring crop of grass; by the very trifling devotion of about a single acre of land to their cultivation. I repeat, my extra manure pays me for all my extra expense; and my peace of mind is above all price." I thought of my poor starving animals at home, and shortened my visit, and might return and be prepared to practice the doctrine which my friend had been preaching.—*Eur. Cabinet.*

JOHN LACY.

Schenckskill County, April 1, 1841.

The following remarks, from the N. E. Farmer, should be read in connection with the article on Hay Making in our last number:—

Drinking in Hot Weather.

MR. EDITOR.—In your number for June 23d, is an excellent article on Hay making. I rejoice to see so many of these plain, practical articles in your paper; and hope they will be read extensively, and be as extensively useful.

There are one or two thoughts, however, in the concluding paragraphs of the article to which I allude, which do not seem to me so much in accordance with general experience as I wish they were. You say—and I know others have also said—"None but the intemperate are injured by drinking cold water."

Now, unless you mean that the excessive drinking of cold water is itself intemperance, I am confident this statement cannot be true. That intemperance men are injured most readily by cold water, I have no doubt; but that any man, who is at once over-heated and over-fatigued, may be injured by drinking cold water in large quantities, is at least equally certain. Indeed, it is certain that he who is either over-heated or over-fatigued, may be injured in this way. Cases of injury from the former cause are of almost every day occurrence.

I know what is the main thing intended by the writer of the article in question, in the remarks to which I have here alluded; and I rejoice at the effort. To put down the use of bad or even doubtful drinks, and put up cold water, is noble; and my God speed him who does it, or assists in doing it. Nevertheless,

we must avoid doing evil, if we can, in our efforts to do good. And instead of saying, "There is no danger from frequent drinking in the hottest weather," take cold water as often and as freely as you please—there is no danger from it, if you have not been too long without drink." And instead of this advice, I wish with all my heart you had said something like the following—that is, had you believed it: "There is no special danger from frequent drinking, in the hottest weather, provided you use the following cautions: 1. To drink very slowly. 2. To drink but little at a time. 3. To have your drink, though cold, not excessively cold. 4. To use but little drink with or near your meals. 5. To drink but little, very little, when over-fatigued and over-heated.

With these instructions, you had of all drinks for quenching thirst; there is no danger from it, with the restrictions above; if you have not been too long without drink," &c.

You say, "The lay worker must have a full supply of drink; perspiration will be free, and he must have something to support it." Yet I can point you to a laborer now over 60, and healthy and strong, who has drunk almost nothing at all between his meals all his life long, though he has perspired very freely, and no man has enjoyed his life more. Yet observe, his meals are better than those of the average of men. I can tell you of another individual, whose enjoyments are purely agricultural, and whose labors are very severe—calculated to exhaust him, and the common way of thinking; who can labor through the summer and drink nothing at all, and who for acutely ten months, beginning with August 6, 1840, did so. And not only so, but he suffered less from thirst during the time, than he ever did before in any of the months of his life. But then he lived right otherwise.

These facts are not mentioned, Mr. Editor, to induce your readers to go without drinking at all, for I cannot advise a person in the world to do that—at least as long as he retains his present habits in other respects. My object was simply to show that we need far less drink than is usually supposed, if we only exercise, eat, sleep and drink as we ought.

But I am extending these remarks too far perhaps. Excuse the freedom—I will mention, I am sure, when I have taken. I was brought up a farmer—and thank God, an intelligent one for it a time—and I still love farming and the farming interest, and the welfare and happiness of the farmer. Would that I had the means of being a New England farmer now, on a small, but truly rational scale and system.

Yours, &c., WM. A. ALCOTT.

Dedham, June 25th, 1841.

[I]f we think Dr. Alcott for his strictures upon the remarks we made last week. His long continued attention to matters pertaining to health, entitles his opinions to much weight. We most cheerfully make them public. But at the same time we are far from receding an inch from the ground we took last week. Will the over-heat and over-fatigue—heat, if cold water is taken with sufficient frequency? It is possible that the over-fatigue may; but if it should, we question whether cold water, to any extent which the appetite craved, would be instantly and excessively injurious; (for the injury dreaded in these cases is the violent pain which often proves fatal in a short time.) Our belief is, that if cold water is taken so frequently as to prevent the over-heat, there is no danger from its freest use. We refer, of course, to danger of severe attacks of pain. Whether it would not be permanently better for our laboring people generally to use less drink, is a question to which we had no reference.

From the London Farmers' Magazine.

Destroying Rats.

SIR.—The following is a reply to your correspondent's inquiry as to the best mode of destroying rats. Should he find either of these methods succeed, let him oblige by a reply through your paper.

1st.—Corks cut thin as sixpences, roasted, or stewed in grease, and placed in their tracks.

or.—Dried sponge in small pieces, fried or dipped in honey, with a little oil of rhodium.

or.—Bird-lime, laid in their haunts, will stick to their fur and cause their departure.

If a live rat be caught, and well rubbed or brushed over with tar and train-oil, and afterwards put to escape in the holes of others, they will disappear.

Poisoning is a very dangerous and objectionable mode.

The proudest man on earth is but a pauper, fed and clothed by the bounty of Heaven.

Mr. Neff's Stock of Short Horned Cattle,
TO BE SOLD ON THE SIXTH AND SEVENTH OF SEPTEMBER NEXT, NEAR CINCINNATI, OHIO.

The attention of the readers of this paper, in the West and South, is invited to the notice of a sale of cattle inserted in another column. Mr. Neff has for a number of years given his particular attention to the raising of improved cattle, and has spared no expense in procuring the very finest animals to breed from. His herd has now become so numerous that he has determined to sell off the whole or the greater part, in order that he may begin anew. The writer of this had the pleasure of viewing these cattle a few days since, and he does not hesitate to pronounce them the finest collection to be found at any one place in the United States. If any of the cattle-loving readers of the Farmer chance to be in that part of the country previous to the sale, they must not fail to **Go and see.**

On arriving at the Queen City of the West, first call on Mr. Ailick, the editor of the Western Farmer & Gardener, and if you are not already a reader of his excellent paper, subscribe for it at once, and in it you will find a complete list with pedigrees of Mr. Neff's cattle, and numerous fine portraits of animals, engraved by Mr. Foster. Mr. Ailick is a good judge of stock, and if not too busy he will offer to accompany you to Mr. Neff's farm. If so, happy are you; and with old Kentucky in the harness, you start off right cheerily down Western Hill, and on a good turnpike road over the Cheviot Hills till you come to the Seven Mile House; then turning in at a gateway you enter the premises of Mr. Neff, and the first object that arrests your attention is a number of splendid two-year old heifers in a small pasture in front of the house. That very large and handsome red and white one is Louisiana; that beautiful white creature of smaller size is Clifford; the other, red and white, is Virginia, and the roan is Georgia. These four are all too perfect and beautiful for description. Then go into another field, and there you see Rosalia, Indiana, Belle Croix, and some half a dozen other thorough bred heifers about two years old; and he must be a nice judge who discovers defects in any of them.

But pass on to the yearlings, and there you will find a dozen or so more, 'Gems' of the first water. Then follow your *Cicerone* to the stables, and you see Cincinnati, a beautiful large white two year old bull; and Young Prince, a promising son of Prince William and Lady Catherine, with a number of other two-year old and yearling bulls. Now take a look at that long row of beautiful calves. Are they not "Buds of Promise?" But hark! Is that thunder? Oh no; it is only the voice of old Brutus. Pass out that door; see here comes, with all the pride and dignity imaginable. What an enormous size, and yet how beautiful he is! Brutus is 7 years old, roan; was purchased at Mr. Whitaker's sale of imported cattle at Philadelphia in 1838. He is in rather high flesh and weighs about 2700 pounds. See how kind and gentle he is! Feel of his soft sleek sides; observe his fine limbs, noble head and neck; his splendid brisket and broad straight back! Taking him all in all, did you ever see a more perfect animal of his kind? But here comes another, who disputes the palm of excellence with him. This is Prince William, 4 years old, roan; also imported by Mr. Whitaker. He is not so high flesh, nor so large, but some consider him superior to Brutus. If he had on more flesh he would nearly equal him in weight, and probably excel him in activity. See with what a stately majestic step he marches back to his apartment!

Here comes the boy with the cows. Walk this way and stand by the gate, so as to view them as they

Do not laugh at that old-fashioned looking

dame in the lead; it is true she is not handsome, but she is an imported cow of the finest pedigree, and, as is often the case, is a very superior breeder. Her name is Ruth, she is 10 years old, and the mother of some of the most beautiful animals in the herd; for instance Victoria, Louisiana, Sibella and Great Western. That fine large fat looking red and white cow, is also imported; she is properly named Beauty; and the only objection to her is, the difficulty of keeping her *poor enough* for usefulness. There are four other fine imported cows, Blossom, Profitable, Strawberry and Lady Catherine—six in all, from which the rest of the herd were mostly produced, and some of the younger ones are no less beautiful than their parents. See that smallish roan cow: that is Ruth's eldest daughter, and one of which she may well be proud. She is aptly named Victoria, for like her Royal namesake her greatest defect is, that there is no more of her—both are rather too short!

Now look at those "Swill Boys" in the barnyard. That long thrifty looking Porker is an Irish Gazier. Yonder are more of them; how thin their coats are! They look as though they would freeze to death in winter; but if you ask Mr. Ailick he will probably inform you that they are a hardy and valuable breed of hogs, although not more profitable than some others. These black and spotted ones you at once know are Berkshires. They are generally considered the perfection of the swine family now-a-days. Here, under this shed, is a fine Berkshire sow, hung in a sling, so that her feet cannot touch the ground. See; her hind leg is bound up with splinters; it was broken by being run over with a wagon a few days since, and being a valuable animal, Mr. Neff determined to make an effort to save her—hope he may succeed.

I fear I shall detain you too long, and yet I cannot leave without taking you through this thrifty vineyard. Look at these Catawbas, Isabella and Schuykill grape vines; how abundantly they bear, and with very little attention. They are more sure to ripen and less liable to mildew or blight than in New York State. There, in that inclosure is a pair of Deer, but they appear to be out of their proper element. This small building at the bottom of the garden is the boys' Rabbit house, and it is well stocked with fatty quadrupeds. Walk up this way through the garden, and pick some of these Ohio ever-bearing Raspberries. They are of good size and pleasant flavor, but not so delicious as the Antwerp. Their great advantage is their habit of bearing plentifully all through the season.

I find I must close this gossiping epistle, and have not time to speak of Mr. Mahard's splendid lot of Berkshire pigs, but you must go and see them nevertheless, and perhaps I may notice them hereafter, together with some other sights seen in Ohio.

Cincinnati, July 20, 1841.

M. B. B.

The Crops in Ohio.

Columbus, July 26, 1841.

Ohio claims the honor of producing the greatest quantity of Wheat, and may perhaps justly be considered the most important agricultural State in the Union. When we meet a friend, therefore, from this State, the first question that arises is usually in relation to the crops. And as this is a topic particularly interesting to the readers of an agricultural paper, I will give it my first attention. I have now spent two weeks in traveling over the State, during the height of harvest, and having taken particular pains to inform myself on the subject, I feel confident that my views will not be found erroneous, although they may differ from some of the published statements.

The Wheat Crop is very uneven; in some places, as along the lake counties, it is generally fair, although

not heavy; in others, as in the southern counties very poor—some fields not worth harvesting. In the central parts, fields of all qualities may be seen—being very good, others of medium quality, and scarcely worth cutting. The difference being largely attributable to the soil, and the cultivation. Taking the whole State together, I was disappointed in the wheat crop, and am confident the yield will be as great as the papers have of late represented. My opinion is that Ohio cannot be set down for last year at *two-thirds* of an average crop.

Indian Corn is the next staple crop of Ohio almost the only crop of some parts of the State has suffered materially this season from the cuts and the drouth in some parts; but in other places very fine, and the whole state must yield a *moderate* crop; although perhaps not quite as large as that of the past year. The immense corn fields of the Scioto, and along other streams in the central and southern Ohio present to the eye of the traveler a very beautiful and luxuriant appearance, affording striking evidence of the wonderful fertility of the soil. While sitting at an elevated window of "Niel House" in this city, (the thermometer in the shade) I was shown a field of 100 acres, in the valley below, that had been planted with corn 40 years since, without any apparent diminution of productiveness. I should judge the stalks now 10 or 12 feet high, and as thick as they can give the whole valley the appearance of a young forest.

Grass, on dry lands was very light; but on the lands it is pretty fair. Much of the hay in this is not cut till after the wheat. Clover is much in some of the best wheat counties, but not so generally throughout the state as I should think it to be with advantage. The *Clascer Seed* crop is very promising—owing to the drouth having checked the second growth.

Oats are much raised, and are generally fair, though not uniformly so.

Barley is but little raised, and is very light.

Potatoes, in some parts, have suffered from drouth but I think the crop generally will not fall much below an average.

In conclusion, it is evident that the Buckeye will sustain her high rank for producing the necessities of life, although the aggregate yield of wheat be considerably less than for the past two years.

M. B.

Canada Thistles, &c.

"AID TO AGRICULTURE."—The Legislature has passed a law appropriating \$8,000 to promote agriculture, by encouraging the formation of County societies, and enabling those societies to excite emulation among the Farmers by distributing premiums. It is all well enough; but we can point out a way which the State authorities might still more effectually promote the welfare of the agriculturists.

Let immediate orders be issued by the Commissioners, for destroying the Canada Thistles and other noxious weeds that abound along the Canals, on the ground controlled by the State. Within the limits of the city of Rochester, there are thistles enough on the Canal and feeder, to seed Western New York. Every man who has farm garden, or who really wishes to "promote Agriculture," should aid in calling attention to the correct of this nuisance, which annually causes more injury to land by sowing them with foul weeds, than can be compensated by ten times the \$8000 now annually appropriated for "promoting agriculture."

ROCHESTER

For the *New Genesee Farmer*.

to S. R. W. on the Corn Laws.

Editors.—Your correspondent S. R. W. reads that the lessons of patience and self-denial S. W. attempts to "read to farmers" are "behind the age." It is hardly necessary to say that he has not gone back far enough by sixteen hundred years—such lessons are coeval with the Gospel Dispensation—they were the least Christ taught and Paul preached.

In former articles on the national tariff, on imported English Corn Laws, &c., I endeavored to show farmers with the necessity of depending on their own industry, and living within their domestic resources, without looking to legislation, or to aid from without. If I have, since I have given, succeeded in convincing a considerable reader of the Farmer, that the high prices were years of unnatural inflation, and debt and ruin; and that the subsequent low prices have been one of liquidation, ruin, and consequent pecuniary distress, when I am well paid for my labors. But as instances given dissatisfaction to the readers of the Farmer, I had resolved to abandon the subject, and not now have adverted to it, but to defend my articles from the strictures of S. R. W.

S. W. felicitates himself on the progress of corn in England, and its spread in the United States. He speaks of the landed interest of England as selfish, and regardless of suffering humanity. He predicts a much better market for our corn when the English Corn Laws are repealed.

And, as one of the readers of the Farmer, he learns from S. R. W. how England is to be relieved with her stupendous debt, without the land tax. Who pays the great bulk of the taxes levied in England: who must supports the enormous trade of £400,000,000, sterling, but the landed interest: who feeds the people but the landed interest: as they are, their selfishness appears wonderfully adapted to the wants of the nation.

And feeding England from the United States! Fifty-five years previous to 1825 all the foreign corn imported into England did not amount to more than one week's supply. Since that time in 1831, a very short crops, all the grain imported was for but twenty-five days' consumption, and the seventh part, or three and a half days' supply, was from the United States of America.

When corn laws were repealed, Europe would supply Britain with corn at as low prices as it is now in N. Y., adding the Atlantic freight, if any; and the present prices in N. Y. are below average, and certainly lower than S. R. W. with his modern notions, thinks they ought to be. In 1837 we imported nearly a million of bushels of Rye from German and Russian ports, at the duty of 25 cents per bushel (an American English, corn law) wheat would often be imported into the United States for our own consumption.

S. W. says that the English corn laws are the cause of the miserable misery. There are thousands of England with wise heads and pure benevolent hearts who differ with S. R. W. in opinion. It is even the time-serving Lord John Russell is ever sincere in his eulogy of free trade, for anything but free trade that has made England rich.

The introduction of foreign corn should cause the capital now employed in British agriculture in part withdrawn, what would be the state of the home trade, which is now the only trade

that remunerates the manufacturer and enables him to feed his operatives. Would not the laboring classes of England then resemble the Irish peasantry, starving in the midst of plenty, for the want of that employment which alone can furnish the means to buy?

S. R. W. says that "the interest of millions at the north are neglected by our Government," "while a few hundred thousand at the south have an accredited representative at St. James, watching every movement which may affect their favorite exports." It is somewhat illiberal, if not invidious, in S. R. W. to accuse the South with any thing more than their due quantum of social and political sins. The facts in the case are simply these: Corn is indigenous in England, but Cotton is not, and besides cotton is an indispensable article in her manufactures, hence the duty on our flour there, and the free admission of our cotton. The South is no more to blame for this discrimination on the part of England in favor of their great staple, than they are that the Compromise Law imposes no duty on imported silks and wines. The South was willing to have these articles taxed, but Mr. Clay preferred placing the duty on such correspondent articles as were manufactured in the United States. Yet by admitting silks free, the exports of the south are increased to the manifest prejudice of the nation at large.

I might extend this communication by dwelling on the importance, not of encouraging a free trade with the old over populated and cheap producing nations of Europe, but of diversifying our agricultural and manufacturing productions in order to build up a home trade, which alone can guarantee to the farmer and manufacturer a remuneration for their labor, secure from without. But I am aware that there are many readers of your paper, who still "sigh for the leeks and onions of Egypt." I therefore conclude with the Scriptural quotation, "Ephraim has joined himself to idols, let him alone." S. W.

Waterloo, July 10, 1841.

Remarks.—It is agreeable to our feelings (and we believe it is in accordance with the wishes of the majority of our readers,) that a small space in the Farmer should be devoted to the discussion of important subjects not strictly agricultural, (nor party political) but we hope our correspondents who write on these subjects will study brevity and perspicuity; and always aim at the elucidation of truth—remembering that discussion does not mean controversy.—Ers.

Practical Remarks on the Silk Culture.

To the Editors of the *New Genesee Farmer*:

It was with pleasure I noticed in your last publication your determination to devote more space in your valuable paper to communications on the subject of the Silk culture. I hope the day is not distant when a paper devoted exclusively to that subject will find ample support in this western section of the State. I have no desire to occupy any portion of your paper unprofitably; but the interest I feel in the success and permanent establishment of that business, has induced me to trouble you with a few remarks addressed to the Farmers of this section of the State, with a view of inducing them to make a fair trial—beginning small, and increasing as their knowledge and stock increases.

I have no desire to effect that purpose by exaggerated statements, and shall state nothing but what is founded on facts, in my own experience, or that of others within my knowledge. I make my statement of what can be done by what I know has been done.

I know that any farmer can commence at a very trifling expense. He can procure 500 *Morus Multicaulis* trees for little or nothing. He can plant them, root and branch, in a small spot of good land, in the

latter part of April or 1st of May; from the leaves of these his wife or children can feed 10,000 worms. The eggs may be purchased for ten shillings, 110 can in a few minutes erect shelves in a room of his house, barn, or any out house, to feed his worms on; if well attended, they will produce three bushels of cocoons, or 3 lbs. of reeled silk. He can in the fall take up his trees, preserve them through the winter, and plant half an acre in the spring. By doing this for three successive years, in the spring of the fourth year, he will have trees to plant five acres, and 20,000 to dispose of. Five acres of trees, with proper management, will feed 500,000 worms. Thereafterward he will have little or no trouble with his trees; he may leave them in the ground all winter, and the next year he may feed half as many more worms, say 750,000, the year following, double the quantity of the first year, or 1,000,000.

The following calculations may appear at first sight extravagant, but as it is well known one acre of trees will feed 100,000 worms, with proper management, five acres, with the same management, will feed 500,000.

I would here observe that these calculations are made without reference to casualties that may happen—such as accidents, mismanagement, unfavorable weather, diseases amongst the worms, &c. &c., though I have no doubt of complete success following constant attention, careful, good management, proper feeding, sufficient room for the worms, and a free circulation of pure air. From my own experience and observation I am perfectly satisfied it is a business worthy the attention of farmers, provided they can get their wives and children interested in it. If so, there can be no reasonable doubt of its complete success.

I have in the following statement valued the cocoons at an average of \$3.50 per bushel. The State bounty of 15 cents per lb. will make them worth \$5. By reeling the silk, which will not cost more than \$1 per bushel, the value will be yet more increased, and by adding the State bounty on reeled silk, fifty cents per pound, the silk, if well handled, will be worth \$8 per lb.

Statement of the produce of 500 trees planted the

FIRST YEAR.		
10,000 worms producing 3 bush. cocoons at		
\$5 per bush.....	\$15 00	
Expence of 10,000 eggs.....	1 25	
Profit.....	\$13 75	
SECOND YEAR.		
50,000 worms, 15 bush. cocoons, at \$5....	\$75 00	
THIRD YEAR.		
200,000 worms, 60 bush. cocoons, at \$5....	\$500 00	
Expences, say.....	50 00	
Profit.....	\$250 00	
FOURTH YEAR.		
500,000 worms, 150 bush. cocoons, at \$5....	\$750 00	
20,000 trees for sale, at \$1 per 100.....	200 00	
(The State bounty ends this year.)	\$950 00	
Expences, say.....	150 00	
Profit.....	\$800 00	
FIFTH YEAR.		
5 acres, the second year in the ground, 750,000 worms, 225 bush. cocoons, at \$3 50.....	\$787 50	
Expences, say.....	200 00	
Profit.....	\$587 50	
SIXTH YEAR.		
5 acres, the 3rd year, 1,000,000 worms, 300 bush. cocoons at \$3 50.....	\$1050 00	
Expences, say.....	250 00	
Profit.....	\$800 00	

The floss and cocoons which have been spoiled for reeling to produce each year's stock of eggs, may be manufactured into cloth, which will contribute a small portion of clothing for the family.

J. B.
Albion, Seneca Co., July, 1841.

For the New England Farmer.

Natural Philosophy.

Why is it that so little attention is bestowed in studying the Works of God by which we are surrounded? How can the Power and Goodness of the Almighty be more gloriously exemplified than by reference to the Skill and Design manifested throughout all Nature?

From the minutest to the mightiest, the works of the Creator are every where characterized by the wise adaptation of means to ends—by traits of Wisdom and Benevolence which proclaim with "silent eloquence" the glory of the Eternal God.

The Farmer is less excusable than any other man for neglecting the wide field of Practical Wisdom furnished for his contemplation by the objects constantly spread before his eyes. The Earth and the Heavens—from the soil and the dews of which his harvests are blessed—are everywhere replete with wonders. The millions of worlds which gladden around him, are scarcely more wonderful than the animalculæ which sport in thousands through a drop of water!

The study of Natural Philosophy is replete with interest and instruction—it cheers the heart, elevates the mind, and promotes the love of God and man in the human heart. It should be one of the prominent studies in our schools, for nothing could more effectually enlist the interests and affections of the young—it should be a frequent theme in the sacred desk, for what more powerful auxiliary could Religion have in securing the attention and dignifying the character of manhood?

Let the Farmer consider well this matter—consult some of the writers celebrated in Natural Science—exercise his own powers of observation and reflection—and he will never regret that he has read this article, if what we write shall have the slightest tendency to encourage him in "looking through Nature to Nature's God." ROCHESTER.

For the New England Farmer.

Education—Agriculture—Correct feeling well expressed.

MISSRS. ERRORS—Much has been said and written on the subject of the education of the young of our country; and I am happy in the belief that a change has been wrought upon the public mind, on this important subject. So much has been said by persons capable of doing the subject justice, that it seems almost useless for me to say anything; But I consider it of so much importance, that I am anxious that it should be kept before the public mind.

A few years since, a large portion of our citizens seemed to think it servile and mean to labor in any capacity—and especially as a farmer or mechanic. Our young men seemed to be bent upon getting a living "without work." And our young women, when any thing happened to be said about "work," seemed very nervous, if perchance they had been guilty of such a crime, not to let it be known. This, I admit, was more generally the case among a certain class—a sort of "would-be somebodies."

I am in the belief that the public mind has changed on this subject. Young ladies seem not so fearful that it shall be known that they attend to household duties: And young men, instead of begging a situation behind a counter or in some musty office, seem willing to employ themselves in that more noble and useful avocation—the cultivation of the soil. I say "more noble"—because what is more noble than for man to cultivate those plants and animals that God has given him to exist and luxuriate upon? and in doing which he may more forcibly see the divine goodness and mercy exemplified in its bestowments upon

Breides, it is expressly declared that "man shall earn his bread by the sweat of his brow." Now it is perfectly plain that bread cannot be obtained except by the "sweat of the brow." Some of us must work, or we all starve: And who does not know that the powers and faculties of both body and mind are much more vigorous when we subject ourselves to manual labor? The idea that hard labor cannot be endured by us, is all imaginary. A sound healthy person can work, and he cannot enjoy all the blessings of health without working to some extent.

Let the idea that all healthy persons cannot labor according to their strength, vanish—and let all idlers "cease to do evil and learn to do well." I understand that the decree, "man shall earn his bread," &c. includes all men; and that all men are in duty bound to supply themselves with the staff of life, as far as is possible. I do not say that all shall be farmers, or mechanics, or of any particular calling; but that each should earn his own living honorably: And I am quite sure that there can be no more honorable or sure way of getting a competence, than by cultivating the soil.

But, gentlemen, as I am a new-comer, I will not trespass upon your patience longer. It has been said of some of our most eminent men, they were always brief, and spoke to the point. Would it not be well for us all, and especially our legislators, to think of this?

With my best wishes for your success and the advancement of agriculture, I am, yours,

A FARMER.

Orleans Co., July, 1841.

For the New England Farmer.

More Large Pigs.

MISSRS. ERRORS—I am a new subscriber to your valuable paper, and have just received the back numbers of the current volume. On looking over the March number I observed an account of some very thrifty pigmised by Mr. Sheldon Cook of Genesee county, who asks if any person has raised larger, of no greater age. Also, one by Mr. Samuel Lundy of Waterloo, who challenges the Berkshire to beat his.

Now, I hope these gentlemen will pardon me if I say I think I have outdone them. I slaughtered four pigs, January 1st, that weighed, when dressed, 1379 lbs., being an average of 344 3/4 lbs. each, or separately as follows: 396, 324, 363, 3-6. They were only ten months and eight days old, and were a cross of the Berkshire and common large breed. I think such a cross is a great improvement, and goes ahead of the full bloods.

I am only a young farmer, but I have had considerable experience in fattening hogs; and I have one word of advice to give to my brother farmers on the subject. Buy Fat more spring pigs, and not so many old hogs. Try the experiment, as I have, and you will become satisfied that more and better pork can be made, with far less expense, from young than from old hogs. Attention to this point is particularly necessary with those persons who feed but a small number, and where the trouble and expense of wintering store hogs is an important consideration.

Very Respectfully,

JOHN SHATTUCK.

Oxford, Chenango co., N. Y., June, 1841.

How to Ascertain the Age of Horses.

An esteemed correspondent requests us to publish directions for discovering the age of horses. The following answer must suffice for this month—when we find a better we will give it:—

In purchasing a horse, not the least important matter is to be able to tell his age. In transfers of ordinary farm and saddle horses, great impositions are often practised upon the credulous and uninitiated

purchaser. To prevent this, to ascertaining the exact age of the horse is the object of this communication to the public. The most certain means of ascertaining the age of a horse is to examine the teeth, which take place with the teeth. The twelve teeth begin to shoot in about two weeks after the foal is born. These are called cut teeth and are shed in different periods, and replaced by others. When the horse is about two years and a half old, the four deciduous ones come out, in about another year, four are lost—and in another year, or when the horse is four and a half years old, the four last are shed. These last are replaced by what are called corner teeth. They are hollow, and have a black mark in their cavity. They are scarcely visible, and the cavity of the corner teeth is four and a half years old, the corner teeth begin to fill when he is six and a half, and the mark usually diminishes and contracts, till the horse is seven or eight years old, when the cavity fills up the black mark is obliterated. The horse acquires his canine teeth or tusks about his fifth year. Two in the lower jaw begin to appear when he is seven or four years old, and the upper jaw is pointed out six months after. They continue very pointed till six. Then, the upper seem blunt worn out and long, the gum leaving them gradually the barer they are the older the horse. From fourteen, it is difficult to tell the horse's age—sufficient then to know that he is old, and understand treatment which is given to horses generally the conclusion will be a safe one that he is worth little.—So. Cult. EQUESTRIAN

An Address on American Agriculture.

Before the American Institute, in New York, 14, 1841, by Henry Colman, is an able and interesting production, in the peculiarly pleasant style of author. We make the following extract:

American Agriculture starts in the race of improvement in the enjoyment of singular advantages, by the benefit of all the improvements and discoveries of the philosophers and practical agriculturists of old and new. The Agriculture of Europe differs from that of this country on account of differences of climate and soils, and by various circumstances in social condition, character and wants of the people. But the great principles of vegetation and cultivation are every where the same. Their remarkable improvements in the redemption of unproductive, wet and wet soils, in the irrigation of lands, in drainage and sub-soil ploughing, in the composting and compounding of manures, in the use of mineral manure and more especially in the improvement of their stock, amounting almost to the creation of new breeds of cattle, sheep and swine, will not only stimulate exertions, but serve as examples for our guidance in the cultivation of the sciences, which the peculiarities of situation require.

The French and Germans, if their progress has been as great as that of Great Britain, are now vancing, in a course of improvement in Agriculture with an equal step. In the application of Chemistry to Agriculture, in comparative anatomy and botany in exact experiments, in the institution of farms, where the most important agricultural experiments are carefully going on under the supervision of some of the most enlightened men of the age, at the expense of the state, and in efforts and provisions to create an interest in the art and to extend information, which is required; and especially, systematic arrangement and organization through the kingdom, by which agricultural information collected from every source, and again sent through the arteries into every part of the polity, the French nation is at this time advancing.

American Agriculture, though comparatively infancy, having always had to struggle with the difficulties of no capital and high prices of labor, may nevertheless regard itself with a good deal of satisfaction. The earliest publication on American Agriculture made in 1769; and Eliot's Essays on Field Husbandry were read with interest and instruction for years come. Massachusetts, Pennsylvania, and New York early established Agricultural societies, offered premiums for successful experiments in agriculture and held cattle shows and ploughing matches, which have evoked a strong interest, and created a salutary competition. These three states, in the persons and members of their agricultural societies, I give to the public more than twenty-three volumes of instructive and useful matter. Deane, Lowell, Pickering, in Massachusetts; Livingston, L'Homieu and Pock in New York; Peters, Menzies, Lord and Powell in Pennsylvania; Seilex and Humph-

descent, are names which are destined, with the sanction to any of their distinguished contemporaries, to occupy the highest niches of art in the records of American Agriculture.

Physical Education.

Thou daughters? Have a care of thy body.

ECCLESIASTICS.

Of inhabitants along the shore in the old Bay were becoming less robust and hardly less than the present generation less vigor than the last possessed. The causes are less many—and not a few of them are hidden. Chastity glance at society will disclose some defects of the present generation from the habits of age, which obviously tend to debilitate. The use of our dwellings, rendered desirable by the prices of fuel, causes us to breathe a less pure air than pervaded the dwellings of the yeoman. The times when the chimney corner would hold scores of children; the extensive substitution of food for milk, bean porridge and the like, brought on a degree of feebleness;—the general use of former days has over loaded and weakened the organs in many cases;—the fashion which wears the thick shoe and bow, and exposes the foot and wet, has helped to bring on many malady;—the abandonment of wrestling and other games requiring great muscular efforts, (though perhaps the ancient is wise,) may be a cause of the increase of illness. In short, less of hardihood and more in modes of living, have exerted their enervance upon our community for the last quarter of a century. And though we are still a vigorous, energetic and enterprising people; yet, as these statistics are becoming less prominent, it is probable to inquire into the causes and help to any operation. We feel the need of the amendment, for we think that the intellectual, moral and religious character of individuals and nations, has a close intimate connection with the health and strength of the body. The public good, (not its prosperity in making merely)—the public good—in the broadest, deepest sense of the term—is closely woven with the general health and strength of the people. Therefore necessity is laid upon those who should be faithful public teachers, to discontinue all customs which tend to bring on general illness.

connected with a quotation from a wise man in the next. "Hear ye, ye daughters? Have a care of thy body." and it was our purpose to say this, that the physical education of those who are the mothers of the next generation, is the first of parents; yes, we distinctly put this branch of education first; for while we would have habits of obedience early formed, we are persuaded these and other good habits are of much less to the world when found in one of feeble constitution, than when connected with a healthy frame, as power to act out the promptings of the soul. *The child hardy*; and to do this, the food must be simple, the clothing loose and comfortable, and exact to the weather in all its states, must be habitual. The dirt, and wet and cold into which the will rush with delight, are all contributors to its energy and character. There is much *inattention* in keeping children within doors—*cruel kindness* in keeping them from exposure to the weakening *poison* in the *healthful delicacies* which their feeble digestive organs. Let kind-ness to your offspring be far-sighted. Let it remember health is promoted by vigorous exercise and air. Let it not forget that winter's snows and her suns help to harden and strengthen the young body.

serve the child from immoral habits and exercise them, then it is necessary for this, the foundation of firm health is apparently weak. There has been a tendency for a few years past to the growth of the intellect in advance of physical growth; but this is a contravention of the law of nature, and must in many instances bring death or debility. He who formed the mystic connection between the body and soul, has obviously designed that the growth of the former shall be that of the latter; and any course which shall retard the development of the mind and call it into vigorous exercise in early childhood, is necessarily done with danger of destroying the body.

designed to speak particularly of the physical education of daughters. Let them be accustomed to regular and vigorous exercise, and that too in open air. It is becoming almost barbarous to

send the girls to the milking stool and to the lighter work in the field. We are not without a share of the feeling on this subject which pervades this vicinity; and yet looking at the future and reasoning from well known facts, the conclusion is irresistible that it would be better—far better—better, for them and better for the next generation, that our daughters should engage in the out-door labors which their grandmothers performed. Then a fresher bloom would spread over their cheeks, and more healthful blood would flow in all their veins. They would discharge their household duties with more despatch and less fatigue. Their spirits, graduated by their health, would diffuse more life into the family circle—and the mind, sympathizing with the body, would be clearer in its perceptions, more prompt in its decisions, more efficient in all its operations.

Looking forward to the future, we see not how it is possible for any other than a feeble race to be produced from the pale female girls, of compressed forms, that are growing up in both city and country. The subject is one of delicacy, but it is so closely connected with human welfare, that some obvious truths connected with it should not be suppressed. We say that the same laws by which, in brutes, the offspring partake of the characteristics of the parents, operate in the human species; and no female can expect to be the mother of a healthy family of children, who has not a firm robust constitution. The weaknesses produced by stimulants, by unwholesome food, inactivity, impure air, tight lacing, thin shoes, or avoidance of vigorous exercise, will be transmitted to their children. The sins of the parents are visited upon the children for generations. These truths teach a lesson that should be heeded. Could the young of either sex, but be made acquainted with the facts which we have witnessed, they would learn that the marriage relation often—very often results in a family of feeble and inefficient children, and this too in consequence of such weakness in the parents that could have deterred them from entering into the married state. For we hold it to be wrong for any intelligent being to be voluntarily instrumental in bringing others into existence, when the probability is strong that the children will inherit such weaknesses as will render them unhappy or burdensome to society.

This subject of physical education is more closely connected with human welfare than almost any other that can be agitated. We have not discussed it, but the hints here given may cause some of our readers to make it a matter of serious and useful reflection. Should we but feel it a duty to disclose all our convictions relative to this subject; and could our advice be taken, many of the young of each sex would go down to their graves unwedded and childless, and this too, not often from any faults of their own, than from the faults of parents and of fashion, which have rendered them prematurely feeble.—N. E. Furness.

The Working-Man's Dwelling.

"When we mean to build,
We first survey the plot, then draw the model;
And when we see the figure of the house,
Then must we vote the cost of the erection."

King Henry IV. part 2.

There is such a satisfaction in having a house of one's own, that most Americans begin to think of building as soon as they are rich enough. It is proverbial that this becomes a mania, even in the country, with men of wealth. In quantity, therefore, we have no lack; the defects are in the quality of our architecture. For want of observing the plain dictate of reason contained in my motto, many great houses are finished less splendidly than they were begun. As I seldom take a walk without seeing the dwelling of some mechanic going forward, I am anxious to make a few suggestions on this point.

A good site is almost every thing; in such a land as ours, few are compelled to build in bad situations. Yet half the houses we see in the country are disadvantageously placed. How little advantage is taken of native groves! I have in my eye a very costly edifice, just near enough to a beautiful copse to tempt the belief that the proprietor wished to avoid its shades, while he is making a strenuous effort to bring forward some starveling trees in a miserable clay before his door! The general design is next in importance: this is what strikes the distant beholder. The eye is shocked when, in a clever building, the door has three windows on one side and five on the other. The proportions of length and height, the pitch of roof, the number and size, and arrangement of lights, are all matters which demand careful study, in order to produce a good effect; but in most cases they are left to

chance or whim. Symmetry is as cheap as disproportion, and rich men should not monopolize all aesthetics and taste. A good plan gives beauty to the plainest materials, while no expense can render a false proportion elegant. A well-designed cottage, of the humblest dimensions and simplest line, fills the eye, and gives repose to the mind. But luxury cannot hide bad taste; it often betrays it. We may here apply Crabbe's couplet—

"Faints that in dusty pictures rest unknown,
Are in an instant through the varnish shown."

Men who come suddenly to wealth are greatly in danger of falling into this trap. The showy in architecture is usually coupled with the vulgar; just as in dress the finest are not the truly well-built. Pope has satirized this abuse of ornament:

"Load some vain church with old theatrie state,
Turn arcs of triumph to a garden gate;
Reserve your ornaments, and hang them all
On some pitiful dog-hole arch with ends of wall
"Then clap four slices of plaster on't,
That faced with bits of rustic makes a front,
Shall call the winds through long arches to roar,
Proud to catch cold at a Venetian door."

Some of our builders, I hope, will read these essays; their influence is a great moment. It well instructed, they will tell such as apply to them, that the word *Architecture* is not confined to the massy piles of public edifices, but that the very same principles which draught the Birmingham Town Hall, or the Madeleine, can descend to plan the cottage or the rustic bridge. These principles ought to be studied, not only in our colleges, but our lyceums, and other institutions for the instruction of our working-men. Books of architectural plans should be compiled and abstracted from the more costly European publications. I am sure any one who is familiar with the *Taylor's Magazine*, will grant that there is no insuperable obstacle in the way of a builder's perusal. And not architectural alone, but all planners and proprietors should familiarize their eye to the contemplation of good models.

The day it is to be hoped will come, when even the day laborer will not think it necessary to be slovenly because he is poor, and when the most incessant drudges shall begin to see that there are some good things besides coin and bank-notes. The practical man whose views are enlarged, will not fail to see that pleasures of imagination and taste have also their price. Decoration naturally comes after use; we build our houses before we decorate them. But in the advancement of society, there is a stage at which men always set a value upon ornament; and though these circumstances may breed luxury, they have fruits which are desirable, such as increased contentment, placid joy, refined taste, cheerful reflection, and the love of home.

Along the bank of a half-finished canal I saw, the other day, a settlement, which, at a furlong's distance, showed the origin of its tenants. Extravagant houses, barrel chimneys, floors without boards, windows without glass, and a dingy hall at the entrance; these afforded all the symptoms of a *hovel*. Here was no decoration, and I argue concerning this settlement, that there are no intellectual pleasures, no taste, no gentleness, no freestone happiness.

Let me change the scene. I knew a family of English people, no richer than those just noticed, who lived in a dwelling no larger than one of these—but how different! I see it yet in memory, its whitened palings and beaten walk to the door, its tight sides and close roof, and especially its edge of summer flowers around a plot of the cleanest grass, and its roses and woodbine creeping over every window. They were poor, but they were tidy. More than this: they were fond of natural beauty, and fond of home, and therefore always aiming to make home lovely.

Every reader has many times seen the same thing, and some have already learned the connection between simple decoration and domestic virtue and peace. Why does an English cottage strike an American with surprise? Why does he look, as at a strange thing, upon the French peasantry taking their evening repast beneath their trees and vines? Because we Americans are so peculiarly practical, and so possessed of the demon of trade, that nothing is valuable which cannot be sold. Value is becoming equivalent to vendibility. Valuable means saleable: worth means money. If a flower, or a hedge-row, or a cascade, or a bust, or a prospect, add to the price under the hammer, these things are valuable, and are straightway inserted in the lithographic view of the auctioneer. They are useful. Usefulness is that quality of things where by they bring money.—*Working-Man*.

The Orchardist's Companion.

Will the Farmer's Cabinet, or some one who knows, please inform us of the "Terms" of this publication? It is of course a splendid work, but is it not too costly for our republican economy?



The Ruta Baga Hook.

In accordance with the request of Mr. Ernest Skinner, we give a description of his ruta baga hook, as published in the Cultivator.

The implement is made with a strong eye and a handle like a common hoe; the blade is a piece of a hand-saw blade, 4 inches by 6, riveted on to the eye; the hooks or prongs are six inches long, and of the same piece with the eye.

In using it, the man walks along the row, and by a light blow with the edge cuts off the top; then turns it and with the hook blade pulls up the root. Any good common hand can cut and pull from 600 to 800 bushes with it in a day.

Blight in Pear Trees.

There has been much complaint in this section of country, about blight in pear trees. The bark upon the pear tree is thinner than upon almost any other tree, and as the sap flows, the hot rays of the sun against the stock of the tree, stop the circulation; and the consequence is, that a space two or three inches wide on the sun side dies, leaving the stock dead. I would recommend to take the bark from a chestnut, something larger than the pear tree, place it sap side up exposed to the sun, until it rolls up, place it around the trunk of the pear tree, and let it remain during the hot weather.

Yours,

JONA. J. WATSON.

Bucks Co., Pa., 1841.

Wonderful Precocity.

FRIEND BATHAM—My beautiful half blood Durham Heifer "Nelly" aged ONE year and TEN days, was this day safely delivered of a fine heifer calf, sired by "WELHAM." So far as my knowledge extends this case has no parallel, and I am happy to say that the young mother and her offspring are apparently doing well. Respectfully,

J. C. HATHAWAY.

Farmington, 7 mo 3, 1841.

We have never known an instance of precocity quite equal to the above. Alexander Kelsey, Esq. of this city owned a heifer last year which calved at the age, we believe, of 14 months.—Eus.

"Gallibility" Gallinippers!

In our June number we copied from an exchange paper a short paragraph headed *wonderful discovery*, announcing the very important fact that Mosquitoes might be substituted for Leeches, in medical practice. But "one of our agricultural contemporaries" is so fearful, lest his readers will be *hambugged*, that he takes special pains to advise them "not to forsake their harvests to enter into this Mosquito Speculation!"

Now we are quite sure that our brother scribbler would not treat this subject with so much indignity, were he not ignorant of its importance. If he had ever traveled in the Great West, he would have been aware that these animals form the principal part of the live stock of many parts of that country. Along the borders of the Manumee and Walash rivers, they have an improved breed of Mosquitoes, called Gallinippers, which in size and action greatly excel the kind known in this state. They are easier raised than Berkshire pigs, and are in much more common use than leeches, for the purpose of depletion. We see but one reason why they should not become quite an article of speculation; and that is, the necessity of raising them in the spring of the year, to prevent their putting up the cow.

Does the Curculio fly up into the Trees?

A correspondent informs us that the Curculio can fly (3) and consequently any contrivance fixed around the body of the trees will prove of no avail. Now we readily admit the premise but the inference does not necessarily follow. We have not, as he imagines, "fallen into the common error of supposing that this insect cannot fly." But does it fly up into the trees?—that is the question. Who will answer from positive knowledge?

The *Silk Bounty Law* was passed as reported by the Assembly and published in the June number of this paper. It was not altered or amended.

Late English News.

The Steam-Ship Great Western arrived at New York, July 29, with London dates to the 11th.

The whole country was in a great state of excitement on account of the elections, which were nearly over. The returns were not quite all in, but it was certain that the Tory party would have a majority in the new parliament, and consequently an entire change would take place in the Ministerial Cabinet. This revolution renders it pretty certain that no modification of the Corn Laws will take place at present. This subject was made a test question in most parts of the kingdom, but so powerful is the influence of the landed interest that it controls the majority of voters. It is predicted that the triumph of the Tories will be short lived.—We think it likely.

The appearance of the crops is said to be promising, but the weather had been rather unfavorable of late. The prices of Wheat and Flour had advanced somewhat. American Flour in bond was selling at 26 to 28, per bush.

NEW YORK MARKET.

WEDNESDAY, JULY 28.—The receipts of Flour to-day are trifling—the demand is moderate. We quote Genesee at \$3.50 a 5.50; Ohio \$3.25 a 5.75; Michigan \$3.12 a 5.25.—Southern \$3.50. In consequence of a temporary light supply of Ohio and Michigan, sales of these descriptions have been made at higher rates than we have quoted. The market is bare of Corn of all descriptions—sales 800 bushels Southern at 64¢, small lots Northern at 67¢ per measure. No sales Rye. Northern Oats plenty and dull at 43 a 44¢. Potatoes are in fair demand at 5.50. Pearls dull at the same rate.

The following is from the Commercial Advertiser of Wednesday evening, July 28th.

Flour—Annual Flour is scarce and the demand better today. Sales were made of about 1500 barrels from store this morning at \$3.75.

Tuesday, July 29.—Flour is better again to-day—good brands of fresh cargo sold at \$5.75, and flour from store that is scarce, brings \$5.75. For Ohio, the rates are \$5.25 a 5.75. In Southern flour there is no change.

OSWEGO.

OSWEGO, JULY 25.—Flour has declined during the past week, and is now worth at our mills from \$3 to \$3.25. A fall in the New York and Canadian markets, and improved prospects of the new crop, have given it a downward tendency to prices. Five hundred barrels of mixed hands on Saturday, at one of our mills, at \$5; while \$3.12½ was refused at another mill.

MONTREAL.

MONTREAL, JULY 28.—Flour.—The market is extremely dull, but prices are not liberal. Genesee at \$3.50 a 5.50; Ohio \$3.25 a 5.75; and Michigan \$3.50 a 5.75. Ashes—Potatoes \$5.50. Pearls, no sales.

CINCINNATI.

CINCINNATI, JULY 25.—Flour.—Since yesterday noon, 301 bbls. have been received by canal, about two-thirds of which were sold at \$4.15; one small lot at 1.25, and 90 bbls. a choice brand, at \$4.31. A sale of about 150 bbls. City Mills yesterday evening, at \$3.75—sell selling by dry load at \$1.50.

CLEVELAND.

CLEVELAND, JULY 27.—The supplies of wheat by wagons, are very trifling, and \$1 per bushel is readily paid. Sales from boats have ranged from \$1 to \$1.05, according to quality. The quantity offered is small. Flour has been selling more freely, than the demand required, and prices have given way, sales having been made at \$1.00 a \$1 from hands: the latter price is not accepted by some of the holders.

No ADVERTISEMENTS will be inserted in this paper except such as relate to Agriculture, Horticulture or Rural affairs; and none will be inserted more than three times in succession. Terms of Advertising.—For 12 lines, or less, \$1, for the first insertion, and 50 cents for each subsequent insertion.

ENGLISH IMPORTED SEED WHEAT.
FIFTY or Twenty kinds of the finest varieties of ENGLISH WHEAT are for sale at the seed store. Amateur farmers are invited to call and examine it.
Aug. 2. BATHAM & CROSMAN.

FALL SEASON.

THE IMPORTED ENGLISH HORSE ALFRED
IS now at my Stable in Greece, 6 miles west of Rochester, near the Canal—and will continue there until the first day of September.

All owners which may be sent shall receive the best attendance, and fees and escapes being at the risk of the owner.
THOMAS WEDDIE.
Greece, July 28th 1841.

Great Sale of Durham Cattle.

THE sale of cattle, advertised by the subscriber to take place at his farm, on Wednesday, 28th of July, has been considered of circumstances, been postponed till MONDAY and TUESDAY, the 6th and 7th days of SEPT. On those days it will be held at public sale, without reserve. On his farm near Chertsey, seven miles from Canning, perhaps THE GREATEST NUMBER OF REALLY CHOICE INDIAN CALVES OF THE IMPROVED SHROPSHIRE BREED, to be found any one place in America.

There will be sold at the same time and place, a LARGE NUMBER OF FIVE BONES, OF THE ORAZER AND BERSHIRE RAPE, A VARIETY OF SHEEP, consisting of Southdowns, Bakewell, Cotswolds, &c.—the property of many of the best breeders of this region.

Also, a very fine farm of 115 acres, with good brick hot and cold improvements.

The terms of sale for the cattle, will be *one year's credit* and for all sums over \$1000 the privilege of a further year time, by paying six per cent. interest—approved personal receipts.

The terms for the farm will be one fourth in hand, and balance in three annual payments, with annual interest six per cent.—with mortgage on the premises for the same part.

WILLIAM NEPP

Cincinnati, O. July 15th, 1841.

FRUIT TREES.

THE subscribers have for sale, at their Nursery, near Macedonville on the Erie canal,

3000 Peach trees, of thrifty growth, at 25 cts. each, \$30 for 1200.
800 Cherry trees, (seedling stocks,) from 3 to 5 ft. high 37½ cts. each.

700 Apple trees, 3 to 7 ft. high, 25 cents each, \$18 per 100. Also, a large number of hand sown pear, apricot, plum and nut trees, of smaller size and of the best varieties.

The Peach trees consist chiefly of the following varieties: Early Ann, Titcomb's Early, Large Red River, Early York, White Imperial, Royal Kensington, Seedling's (near Red), Yellow Althorpe, Red Creek Malcot, Late York and Heath, forming a succession of fine fruit for more than two months.

The varieties of the apple are, Woolman's Early, Yello Harvest, Bough, Nine Quia Non, Bollington's Early, Straverry, Rambo, Bellflower, Swan, &c.

The Cherry trees include the May Queen, Early Richmond, Black Tartarian, White Tartarian, Black Carone, Triebner Gage, Cranston, &c.

Of all of which have been propagated from bearing trees and their descendances or excellence fully tested by rigid examinations of the fruit.

This practice will be invariably adhered to, however limited its consequences may be. In propagating, from the choice trees, the seeds of the fine collection of preserved fruit in the possession of David Thomas of Cayuga county, and no pains have been spared by the subscribers in selecting their list, and in the selection of the seedling from which, in addition to the above, will be offered to the public next year.

Orders from a distance, directed to Thomas & Smith, Macedon, N. Y., will be accompanied with remittance will be faithfully and promptly attended to. Orders may be so left with David Thomas, near Aurora, Cayuga county, Purchasers to please state when any disposition is given the subscribers to be selected. V. R. SMITH, Macedon, N. Y. 1, 1841. J. J. THOMAS.

ROCHESTER PRICES CURRENT.

CORRECTED FOR

THE NEW GENESSEE FARMER, AUGUST 2, 1841

WHEAT,	per bushel,	\$ 1.00 a \$ 1.09
CORN,	"	50
OATS,	"	35
BARLEY,	"	41
RYE,	"	50
BEANS, White,	"	62½
POTATOES,	(now)	75
APPLES, Desert,	(do.)	75
..... Dried,	"	75
FLOUR, Superior, per bbl.,	"	5.00
..... Fine,	"	5.00
SALT,	"	1.50
PORK, Mess.,	"	10.00
..... Prime,	"	9.00
BEEF,	per 100 lbs.	4.00
EGGS,	per dozen,	10
BUTTER, Fresh,	per pound	12½
..... Firkin,	"	8
CHEESE,	"	6
LIARD,	"	6
TALLOW, Clear,	"	8
HIDES, Green,	"	5
FEARL ASHES,	per 100 lbs.,	5.00
..... POT,	"	4.50
WOOL,	per pound,	20
HAY,	per ton,	8.00
GRASS SEED,	per bushel,	1.00
FLAX,	"	87½
PLASTER, (in bbls) per ton,	"	6.00
..... bulk (at Whentland)	"	3.50

The weather is fine, and farmers are busily engaged harvesting their wheat. But little business is doing in market; some small lots of new wheat have been brought in mostly for retail trade. The price of wheat is rather unsettled at present, and I decline to trade, but we do not think the late accounts from England and New York are calculated to depress the markets. Considerable quantities of flour have lately been shipped from this place for Montreal—and lately dull.



B. EATEHAM, F. CROSSMAN, { VOL. 2. ROCHESTER, SEPTEMBER, 1871. NO. 9. { JOHN J. THOMAS, M. B. BATHAM, Editors.

PUBLISHED MONTHLY.
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Address BATHAM & CROSSMAN, Rochester, N. Y.

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To Readers and Correspondents.
We are compelled to omit several communications, as written in Canada, and various other matters incidental for this number. Our friends must write in the month to ensure their articles on insertion. Mr. Bateham has been absent most of the past month.

Efforts for the Month.
Sowing wheat is the most important operation to farmers during this month. It is a matter of consequence whether the cultivator obtains ten, thirty bushels at next harvest. Let the business then be done right. Above all, do sow after wheat of this year. Many of the mis-crops this season resulted from this practice. Plough *deep* at least once, where the soil will admit of it. If subsoil ploughing cannot be practised, no as near to it as you can. A large portion of the soil of Western New York, as well as of other crops, contains a portion of marl (lime), and mixing with the rest of the soil, is one of the very best ways of applying this manure. Independently of this, ploughing is very useful. Plough *early* and turn *narrow* furrows. This is only way to do the thing right. Get the best seed you can find in all the country as if it does cost a little more. The kind we recommended on page 141 of last volume of this paper, fully sustains the character there given of it. Let seed be as clean as possible, as it is exceedingly likely to take seed as to plough and prepare your land for wheat, and then go and sow cockle, peas, and such wretched stuff for a crop.

Lastly, plough in your wheat with a light plough, leaving it rough just as the plough leaves it. At least try the practice. We have known it to succeed admirably. And do not forget the well cleaned surface furrows for draining, where they are wanted.

Cut up corn this month as soon as it becomes hard, that the fodder may be well saved. The ripening process will be fully complete by the nourishment afterwards derived from the stalks. Never mutilate corn by *topping* it.

Let your hogs begin to have the dropping apples from the orchard, and they will fatten rapidly.

Never feed unground grain of any kind, to hogs. Let your swill or hog-porridge be fermented if you cannot boil it—to do which, you must have two swill tubs or barrels, feeding from one while the other is fermenting. But extensive hog-farmers should always boil the food.

Keep every thing in first-rate order—cattle in good keeping and fine condition—horses lively, and not over worked nor under fed—calves fat and growing, so that they may winter well—and every thing else in equal style—and finally, pursue the maxim of the distinguished classical American statesman,—“Be sure you're right, then GO AHEAD!”

Wheat and Canada Thistles.
If the Canada Thistle should generally induce our farmers to cultivate their land better, its evil aspect would be greatly softened, though we should not dare to call it a blessing in disguise.

In years past we have frequently endeavored to call the attention of cultivators to this subject; and have given some details of the facility with which this weed could be destroyed; but our last number contains two communications, which we think deserve some further notice; and we would hold them up for the encouragement of others.

“I commenced about the first of June,” says our friend V. Yromax at page 114, “and ploughed them about once a month, and harrowed them as often—till about the first of October. The result is, their entire destruction, except a few places where the ploughing could not be well done.”

Not less favorable is the report of our correspondent AUGUSTUS D. AYERS at page 117. “The field contained six acres, principally occupied with Canada thistles, on which a Florida war had been waged for twenty-five years, or more, with little prospect of success or termination.—In the latter part of May, I broke it up—ploughed the ground deep four times, and harrowed so often in the heat of summer.—The ground is in good condition for next cropping.” In consequence of this superior culture, and high manuring, the crop of wheat which followed was very fine; and we are left to infer that nearly sixty bushels to the acre were obtained.

Two causes have conspired to make farmers slovenly, and to spread the Canada thistle: One is, the strong desire to raise all the wheat they can, by putting in as much of their land as possible; and the other is, the very short time they have to prepare the ground. Business in the growing season of this climate, hurries the farmer at every step. The getting in of spring crops is often greatly retarded by unfavorable

weather, and sheep-shearing, road mending, and sometimes continued rains, interfere with breaking up the fallow. Then comes the boring of corn, potatoes, and field-beets; and unless the farmer beats himself, laying-out will be on his heels. Harvesting the barley, wheat, and oats, is rarely finished before the middle of the last month of summer when many are beginning to sow their wheat—so men do seed time and harvest approach in this district. How then is manuring and ploughing the fallow once a month to be accomplished? Go over less ground—apply the same amount of labor to half the quantity of land—raise double crops to this use (no weeds)—and receive the remainder of the farm in pasture and meadow.

Sometimes however, slovenly management succeeds well with wheat; and to succeed once, like gaining a prize in a lottery, encourages the farmer to try it again, though there be ten chances against him. Success is always sure to be remembered. “Corn stubble,” or potato ground is often sowed too late for the wheat to *filler*, for it rarely if ever fills well in this district if sowed more than a week after the run crosses the line; and then between freezing out in the winter and spring, and the rust or blight in summer, the crop stands but a poor chance. From lotteries of all kinds farmers ought to keep clear.

We now revert to another branch of our subject. Deep ploughing, or pulling up the thistles by hand, is far more destructive than to cut them off near the surface. In the latter case, the horizontal root with the upright stem attached to it, remains undisturbed; and the plant prepares to re-erect its foliage without delay. But when the plough breaks up the horizontal runner, or the barrow draws its fragments to the surface it soon perishes in dry weather. There is a profit in taking the most thorough course.

The Flowers of Summer.
Very few annual flowers have succeeded this season, so severe has been the drought. We have not seen *Bulmarine*, except some that were watered by a small ill. *Convolvulus tricolor* and *Linnæa coccinea* attempt to display their beauties, but they often droop in the parching air. Some species of *Ipomoea* (besides the following) are also in flower, but less vigorous than usual.

The *Cypress Vine*, one of the most delicate forms of the Vegetable Kingdom, requires a rich soil, and seems to enjoy a treat of capsaunds. It is a morning flower, not intended for late rises.

The *Tiger Lily*, though shortered in its stem, has lost none of its fireliness; the *Galardia* continues to unfold its purple disk and yellow rays; and *Echinops spheerophyllus* appears not to suffer from any lack of moisture.

The same remark will extend to the *Red colored Fox Glove*, so erect in its stem, and so neat in its leaves; to *Thibiscus anolinensis*; with its fine ray flower; and to *Cichorium intybus* with blue rays so prettily fringed. Yet this plant is generally an offense because it is an intruder, hard to be restrained within reasonable limits, and then pertinaciously adhering to the spot it has chosen.

Silene regia displays its brilliant scarlet; and the old Monthly Honeysuckle, like all other sweet flowers is less fragrant in dry air, but always interesting on account of its beauty, and of our early recollections.

The *White Argemone*, an old favorite—and the modest *Populus lanceolata*—blossom. *Scilla sibirica*, while *Periploca graveolens*, as if resolute, in the hot dry air of its native land, seems to rejoice, and puts forth its long polished leaves of dark green, in abundance.

Last year we mentioned a *Flora* of rober purple in the morning, which changed to a rosy hue in the afternoon. The same phenomenon continues. *Brick's Seedling* is beautiful.

Machinery applied to Agriculture.

MESSRS. EDITORS.—I herewith send you a notice in the New York Tribune, of a work which proposes as great a saving in the manual labor pertaining to rural economy, as the power loom has effected in the production of cotton cloth.

I have often thought that if a portion of the great labor-saving improvements, which have in late years been applied to manufactures and river navigation, could be so applied to agriculture as to enable the North to accomplish more, with less bodily exertion and expense of muscle, and the South to dispense with slave labor; that a greater social revolution would be produced by it, than our eyes have yet seen, or our hearts have yet felt. It may be said that man, to live *well*, must "live by the sweat of his brow;" figuratively speaking, that man does so live, who lives by artificial production; the high civilization which labor-saving machinery induces, only creates those renewed wants, which vary, improve, and stimulate production. The simple comforts which in past ages could only be indulged in by the rich, are now attainable by all; and if the time which Henry the Fourth wished for, when "every poor man could have his towel in the pot," has not arrived, it is alone the poor man's fault.

It may be said that the cultivation of the potato in Ireland, by the introduction of a more cheaply raised necessary of life, has produced the same effect as labor-saving in agriculture, and that the result has trebled the population of Ireland without adding anything to their social comforts. But may not the wretchedness of the Irish be attributed to other causes than to an increased population? Is it not rather to a lack of a well directed manufacturing industry; to the want of that home trade which the *disunionism* of the aristocracy produces, by leaving the workers of the soil to the grindings of the middle man and the tide proctor; "Thou shalt not muzzle the ox that treadeth out the corn," is one of those scriptural injunctions which is never read understandingly by the land holders of Ireland. If her aristocracy would stay at home and expend their incomes there, in properly encouraging and directing the industry of the people, there is no doubt but that the condition of Ireland would at least compare with either of the other United Kingdoms.

When reading Humboldt's description of the scanty and widely scattered cultivation in some of the most fertile sections of equinoctial America, I have felt that nothing short of the discovery of labor-saving machinery to be applied to agriculture, could ever bring all the arable land of those hot and debilitating regions into cultivation. What a stupendous revolution in the production of the edible things of the earth, may not be produced by the application of machinery to a soil where organic Nature is enlarged to such a gigantic scale, that not only the earth produces its somptuous vegetation, the trees their parasitic families, but even the air itself is filled to darkness by the pendant drapery of the *lianas*, which hang in festoons from tree to tree at the height of more than a hundred feet.

S. W.

Waterloo, July 26th. 1841.

From the New York Tribune.

THE NEW WORLD, OR MECHANICAL SYSTEM, to perform the Labor of Man and beast by inanimate Powers that cost nothing, for producing and preparing the substances of life, by J. A. Eider. Published by C. F. Stollmeyer. Philadelphia, 75 pages.

The object of this little work is, as the author informs us, to show how to cultivate in a superior manner 10,000 acres of land by one machine and three or four men, with a capital less than one dollar per acre,—how to clear land from trees and stumps, roots and stones,—fill and drain swamps,—make dams, can-

als, ditches, roads and perform any kind of work on the ground,—build houses, and furnish as much inanimate power for any place as stationary machine as is wanted,—all by the same system.

The author of this work is certainly a bold, an original thinker,—is a man of a high order of talent. Men heretofore have only applied machinery to certain general purposes,—to manufactures, mechanics, navigation, &c., but Eider has conceived the gigantic plan of applying it to the daily works of society,—to cultivating our lands, building our houses, roads, canals, &c. To do all this he does not make use of costly powers, like beams of barthen and steam, but of powers that cost nothing, such as the heat of the sun, the wind, &c., &c. He has invented machinery adapted to these powers, and so contrived it as to put to use of them at all times. We of course give no idea of his machinery or invention; the book itself must be studied; it contains plates and full explanations.

Eider has foreseen and explained the immense ultimate results which would follow, if machinery could be applied to agriculture and to the various daily Labors of Man: he sees that it would do away with poverty, elevate the condition of the human race, fertilize and cultivate the tropical climates, which are now neglected and which are the fairest portion of the earth, and lead to a great and fundamental Reform in society.

We particularly recommend his work to attention, and we trust that he may find the means of making a practical experiment of his plan. The views of the most celebrated mechanists have been very limited; they have not conceived the possibility of applying machinery farther than to a few specialties. Is it not painful to see our large canals dug out by single shovels, blocks of granite hewed by human hands; bricks carried to the tops of houses on human shoulders? It seems so to us, and no one has felt it more keenly than Eider, and no one has undertaken before him to invent a general system of machinery for obtaining it.

For the New Genesee Farmer.

ITEMS.

Corn-cob Fed.—The best way to dispose of cobs is of course to grind them with the corn. But we observe two substitutes which have been successfully made use of. One is to soak the cobs in a half hoghead of brine, when the cattle eagerly thrust in their noses and devour them. The other, or better way, is to boil them. One farmer says he would as soon throw away his fodder as his cobs.

Preserving Cheese.—Solon Robinson says a neighbor has practised for several years the method of preserving his cheeses by placing them within a hay stack, where they are kept from freezing through winter.

Foot rot in Sheep.

An intelligent and successful wool grower informs us of the method by which he entirely prevents the inroads of this disease.

It is known that the sheep, when removed from its native mountains and rocks, to the soft and luxuriant pastures, no longer has its hoofs worn away as in a state of nature, by which as they grow they are preserved fresh and sound,—but the outer part, which is naturally intended to support the weight of the animal, grows out of all bounds, until it flaps more or less over the sole, and retains the accumulated earth and filth which collects within. From this the disease originates.

According to our informant, by repeatedly and carefully paring off this crust of the hoof, as often as necessary, the disease is effectually prevented. Where it has already made progress, something more is necessary, as the application of turpentine, or tar with authorization, the disease being very similar in nature to the "foul in the foot" in cattle, which is successfully treated by rubbing a hot iron rod with tar, between the hoofs. Although it had made such progress in the flocks of our informant, as to cause indirectly the loss of several hundred sheep, yet he has

succeeded after a year or two of careful attention, removing it entirely.

He thinks it rarely reaches that degree of malady described by European writers, by whom it is represented to become contagious, and occasion the destruction of the animal; or at least several years would be required to produce such a result; death appearing here to be caused by the severity of winter operating on weakened and emaciated animals affected by the disease.

Resources of the West—Agricultural Riches.

How can we better promote the objects for which the Genesee Farmer was established, than by publishing some articles calculated to expand the thoughts of our Farmers by reference to the growing great and glorious destinies of the Mighty West? The dignity and importance of Agriculture can only be properly estimated by contemplating such views as are here presented in the annexed statements from Mr. Penfield formerly resident in Rochester—a man whose tale and observation enable him to speak confidently on vast topics which he discusses. Were Mr. Penfield unknown to us personally, we have an endorser in his behalf, whose testimony would alone secure an insertion for his statements. That endorser is J. HAWLEY—well known as one of the earliest and steadiest friends of INTERNAL IMPROVEMENT in the State of New York. Mr. Penfield was formerly under the instruction of Mr. Hawley; and doubtless profited considerably by the statistical knowledge and enlarged views of his friendly instructor. The article has not suffered in value by the delay in publication though we must apologize for omitting it till this time—having had it in possession for some months. It is read carefully—let its statements be maturely considered—and let other statements bearing on great questions, be attentively examined with a view to more thorough knowledge of the vast regions watered by our Inland Seas.

From the Cleveland Herald.

Wheat and Flour Trade of the West.

NEW YORK AND OHIO COMPARED.

MR. EDITOR.—In making up some accounts on subject for a private communication, I have thought the figures would not be uninteresting some of your readers; and hope I shall not be considered too tedious for your columns or their patience, in the closing remarks.

There arrived at Cleveland by the Canal in 1850, 500,000 barrels of Flour, and 2,151,450 bushels of Wheat. We consume the same quantity of wheat as in other instances that follow, 5 bushels to a barrel of flour, making the aggregate 1,675,950 bbl. There was brought from wagons besides 50,000 bbl. of wheat and considerable flour; the exact quantity to be ascertained, sufficient, however, for the consumption of the city. The exportation from this place then was equal to 4,755,950 bushels. Several other points on the Lake within this state also are large quantities; at Huron for instance, equivalent 472,878 bushels during the past season. The export of Ohio on Lake Erie we estimate from 5½ to 6,000,000 of bushels. That on the Ohio river we have the means of stating was so much accurate. So portion of the 1,500,000 barrels of flour shipped to Pittsburgh, the past season, was doubtless in Ohio wheat. There are several points on the river that send off more or less, besides those of Portsmouth where the receipts by canal were 34,134 barrels flour, and Cincinnati, by the Miami canal 165½ barrels of flour, and 97,200 bushels of wheat. I put the river export equal to 2,000,000 of bushels making that of the State, not less than 7,500,000 bushels.*

Governor Seward states in his message at the opening of the New York Legislature, in January last that there was delivered in 1849, at the eastern terminus of the Erie Canal, 1,505,135 barrels of flour and 1,395,195 bushels of wheat, equal to 10,420,8 bushels. Deducting from this quantity, that which went from the Western States, as will here

* A recent statement, purporting to be from the Cincinnati Chronicle, makes the export of the State from Cleveland, Huron, Portsmouth and Cincinnati, 5,000,000 bushels.

noted, and there remains as grown in the State wheat, 4,729,468 bushels; giving to Ohio an average of wheat over Western New York of more than 24 millions of bushels, or nearly 50 per cent.

If any flour has been sent from Rochester to Canada, this result will be so far affected, but we append little if any has been sent.

There entered at Buffalo and Black Rock per statement of Custom House at Buffalo, 1,562,888 bushels of wheat, and cleared from Buffalo, per Canal collector's statement 659,635 barrels of flour. The shipment of Buffalo and vicinity of western flour, several thousand barrels more; besides small supplies sold to ports between Ohio and Buffalo.

There entered the Welland Canal 209,016 barrels of flour, and 1,533,765 bushels of wheat, which add to the figures at Buffalo and Black Rock, makes entire export from Lake Erie 7,899,948 bushels. The growth of the Western States—simple as it is and not difficult comparing, the relative extent of land and population being also considered, with that of Egypt yielded even more than her usually abundant harvests. We observe here, that in one county, Erie, on Lake Michigan, the harvest of wheat summer was diminished by blight from what was stated as calculated by a committee, of 560,000 bushels. This quantity, so large, has not been brought to high prices, for the very opposite has ruled.

If the quantity passing the Welland canal there at Oswego 707,157 bushels of wheat, and cleared from Buffalo and Black Rock, 82,829 bushels of wheat, 116,320 barrels of flour were shipped eastward from Oswego, and 35,579 barrels of flour to Canada.

Quantity as before stated by Governor

ward, 10,420,770

eastward shipments from Buffalo and Oswego, 4,691,402

in New York as before, 4,729,486

from Cleveland as before noted, 4,755,950

be average annual export of wheat and flour from whole United States for an indefinite period past, estimated that of Cleveland the past season.

to New York, Baltimore has the largest flour on the sea board; but the inspections there reached 600,000 barrels till the past season by the season which the tide water canal has effected, the seasons exceeded 700,000 barrels, or say 4,000,000 bushels of wheat. New York receives flour from all of the west and south, yet her inspections have been so large as the receipt at Cleveland the season till 1833. Again, if we estimate the receipts at New Orleans and the quantity sold on the above at 500,000 barrels, the west, besides supplying a large emigrant population furnishes more than the rest of the world. We are reminded here that the crop of corn the past season in Indiana or Illinois, cannot be estimated much over 100,000,000 bushels.

would appear that the quantity of western wheat to Canada, including the flour from Oswego and small quantity of wheat to Ogdensburg, was to be 2,309,443 bushels.

he Canal Commissioners of New York in their annual report state the business of the Welland at 100 tons, whereas the wheat alone exceeds that amount; and if the produce of the west going through Welland had entered at Buffalo it would have led the whole amount of tolls of the Erie Canal, or less than \$2,000,000. Less than one-third, of western wheat went to Canada to twenty rent points above Montreal; and so did even this fill these ports with an avalanche rush, that farmers, waking up to the threatened destruction their interests as they conceived, immediately opened the Home Government to lay duties on the exportation of flour and wheat from the United States to the provinces, virtually shutting out the unwelcome flood. We heard also how the accumulation increased at one point of the transit, (Kingston,) complete glint, clogging up the St. Lawrence, occupying not only all the facilities of transportation, but navigation, traversed for nearly two centuries, but had not taken up all the means of storage, large quantities lay out of doors for some time, finally, many vessels awaiting to be discharged formed long quarantine for that purpose. We see what effect this has on the exports of Montreal and Quebec, and how it tends to augment British commerce. The quantity exported from these places the past season was 72,725 bushels of wheat, and 1,094 barrels of flour; equal to 1,633,125 bushels of wheat saving about 7,000 bushels was sent to

Great Britain. But it would seem that Canada has not raised her own bread; for, deducting
For western money sent her, 2,309,441
Her exports above, 1,638,195

The deficiency is, 421,248
But let us follow this flour to the ports of Great Britain, admitted as it is by a very angular and favorably constructed tariff for Colonial Commerce. There have been for several months shipments of flour, not to a large extent it is true, making from New York to England, and if the same amount of exportation of Montreal and Quebec above had been made from New York and the price in England equal to 62s. sterling per quarter, the duties would have been, 31,655,358
But being from Canada they were only, 220,336

The difference being the benefit to colonial commerce, \$864,960
or about 51 cents per bushel.

But to return—such is the West; the "garden" and the granary of America, sending her products from the interior of a continent in every possible direction, taxed as they are by the charges of an inland transportation of 1,000 miles before they can reach the open markets of the world: giving the staff of life to the languishing factories of New England, to Old England, to Canada, and the Cotton and Sugar plantations of the South.

We have stated the export trade of Lake Erie in 1840 at 7,899,948

The shipments of wheat and flour from Buffalo in 1826, the first year after the Erie Canal was completed—the Welland not opened, were "453 tons," or 13,945

Such has been the growth of this one item, of the commerce of Lake Erie in the short space of fourteen years, since the departure of the first canal boat from her waters was announced by the splendid and unrivaled telegraphic cannonade; marking an era in the commercial history of America, second only to that of its discovery by Columbus. Such is the past—of the future; immolation returns from the contemplation with fatigued wing and proclama, "up Lake Erie" at on many points as you will, and with such dimensions as you will, the avenues shall all be filled. Here is a commerce suddenly waked into life, not diverted from other channels, but *new created*; yet more important than that which for centuries had traversed interior Asia, borne by the slow and weary caravan, hailing at the gates of magnificent Palmyra on its way to renewed and commercial Tyre and other Phœnician ports of the Mediterranean, or that subsequently, by another route, for 1800 years deposited its wares in the sampler store houses and more splendid shops of metropolitan Alexandria and Venice; or which at a later period, without reshipment, rewarded Portuguese enterprise in the success of a Vasco da Gama. If

"Westward the star of empire takes its way"

westward too, moves the era of commerce.

The mind in looking at this great change seeks to find what it is, that, with such rapidity is transforming a vast wilderness into fruitful fields; where man had first to cut his path into that wilderness, build his cabin, and clear away the forest before this stream of commerce could begin to flow. The construction of lake harbors and the use of steam navigation have had a great influence in this matter; but, covering high above all other agencies, stands that of the Erie Canal. That was the key that unlocked treasures of ever increasing value and ever augmented growth. Truly fortunate among the sons of men was he whose mind was instrumental in effecting such strides in his country's glorious career. Yet that individual, who, more than a third of a century since, grasped the mighty thought and gave through the press publicity to the grand design in his "Overland route of the Erie Canal" has never had the slightest recognition from his own state that receives the yearly increasing revenue from its tolls. Not less has the National Treasury overflowed from the sales of the public domain to which the influence of that canal has so much contributed.

We mingled in the throng that in last summer's solstice congregated on the green spot of Mumme's banks, the story of whose defence had impressed itself so indelibly upon the memory of our boyhood days. Heard we not, mingling with the war blare of the brass, other bugle notes that came from the still gliding canal boat on the opposite side of the river,

See essays, under the signature of "Horace," reprinted in the appendix to Dr. Hauck's "Memoirs of Dr. Witt Clinton" in 1-23.

pursuing "the even tenor of its way" in on where the battle field of "Tippecanoe" echoes its thrilling tones—where the Welsh rolls its tide toward Mississippi's flood—so that boat heaving on its return the rich harvests from that celebrated field of song.—That canal is one of the daughters of the Erie canal, with others of a munificent sisterhood, bringing its tribute to the national improvement. But ere the clash of arms was heard on that field, there had been developed in another quarter the project, that laid the foundation of this northern line of commerce which has already enriched this interior spot with the arms of its mighty influence, and is fast pervading every part of the illimitable west.

But however unmindful of his eminent services rendered, the generation to which he belongs may be posterity may do him justice. Indeed the enlarged canal itself and its increasing business will be a monument, raised still higher, and the record more indelibly made, of the merits of Jesse Hawley. It is quite beyond the limits of a closing article to even hint at the benefits which the West has derived from his labors. But while we survey with him the vivid panorama of human industry and happiness, which he was instrumental in producing, we would for a moment, point him to that part of the picture where, on a western prairie, he could see "one field of 20,000 acres of wheat" waving its golden head to the passing breeze; and parting with him who would not forget, that his hand touched the spring that set in motion a many thousand wheeled machinery, growing more complex and extended, the hum of whose noise shall be heard far down the vale of time.—If he is worthy of the gratitude of mankind who makes two blades of grass to grow where but one grew before, what shall be the measure of praise awarded to him, who had such an agency in the production of so great harvests as we have considered.

A. PENFIELD.

On Bran as a Manure.

Sir—As this is the season for preparing the turnip crops, I am desirous of calling the attention of your readers and the scientific agriculturists, to the consideration of bran (the husk of wheat) as a manure, not only for turnips, but also for wheat and grass. The great facility that every farmer has of obtaining it from his neighboring miller, and its exceeding cheapness, (now about £4 10s. per ton,) warrants their trying a series of experiments in drilling it with the turnips and wheat, and putting it over their grass lands as a top-dressing; substituting it for bone and other manures, which are costing two or three times as much as the bran would.

Experiments have been tried but not extensively enough to warrant its being said how much is saved in expense, and what quantities per acre ought to be used to render the best return.

It is to this point that I wish attention to be directed, and as Sir Humphrey Davy in his "Elements of Agricultural Chemistry" writes—"Nothing is more wanting in agriculture than experiments in which all the circumstances are minutely and scientifically detailed"—would some of your readers assist this object, and drill a small portion in each of their fields of wheat and turnips, with bran in quantities from 3 to 6 cwt. per acre, and report the result in your paper; that is, the quality of the other manure used, the quantity of the ground experimental upon.

The following extracts from Liebig, would leave, in theory, bran to be at once the cheapest and best manure that could be employed:

"Phosphate of magnesia, in combination with ammonia, is an invariable constituent of the seeds in all grasses. The bran of flour contains the greatest quantity of it."

"The perfect development of a plant according to this view, is dependent on the presence of alkalies or alkaline earths; for when these substances are wholly wanting, its growth will be arrested, and when they are only deficient, it must be impeded."

"So likewise none of our corn plants can bear perfect seeds, that is, seeds yielding flour, without a large supply of phosphate of magnesia and ammonia; substances which they require for their maturity."

"It is the greatest possible mistake to suppose that the temporary diminution of fertility in a soil is owing to the loss of humus—it is the mere consequence of the exhaustion of the alkalies."—Mark-lane Express.

Agriculture is the nursery of patriotism and virtue—aided by science makes a great man. All the energy of the hero and all the science of the philosopher may find scope in the cultivation of one single farm.

PERMANENT.—Benjamin Hodge, of Black Rock.

EXECUTIVE.—COMMUNICATOR.—Moses Case, Allen; Robertson, Aurora; John Becaw, Amherst; Reuben H. Henshaw, Buffalo; Benjamin H. Kestler, Boston; John Hewall, Fort; Victor Hyatt, Black Rock; Othman Warren, Canis; Gardner J. Kipp, Cheektowaga; Richard Sweet, Chees; Samuel Tucker, Collins; Joseph S. Fry, Concord; John B. Hamilton, Chees; George S. Jones, David P. Miller, Hamlet; Isaac Humphrey, Holland; Clement Kinkler, Leicester; William Mills, Newstead; Bela H. Devore, Saratoga; Luel Duggs, Tonawanda; Henry B. Rogers, Wales.

Niagara County Agricultural Society.

(Organized June 2nd, 1841.)

LIST OF OFFICERS.

PRESIDENT.—William Parsons.
VICE PRESIDENTS.—Richard Steele, John Goult.
TREASURER.—James D. McGowan.
SECRETARY.—David S. Cramlin.
RESOLVING.—William O. Brown.
Resolved, That the following comprise the Executive Committee: Timothy Backus, Dr. Townsend, Richard Shell, Robert William Freeman, Alanson T. Odell, Lewis H. Root, Royallson, Maria S. Douglas, Samuel Coleman, Henry, Gen. P. Whitney, Niagara; Stephen Baker, W. Wheeler, Harry Harrington, Hartland; James W. Wheeler, Alexander H. Barker, John H. Barker, New Fane, Daniel Light, Daniel Holmes, Morgan Johnson, Wilson, N. M. and John Sweeney, Henry Miller, Wheatland; John Goodale, Leveet Bristol, David Barker, Porter, Rufus Barker, Alexander Barker, John D. Plater, Lewiston; H. McNet, Daniel W. Craspey, David Galt, Canbria; John Parsons, John Baker, Alfred Post, Pendleton.
Annual fee of membership fifty cents.)

Livingston County Agricultural Society.

The Fair of this society will be held at Genesee on the day of October. Owing to the lateness of the season, it is deemed inexpedient to offer premiums on crops this year, but a liberal amount will be awarded for all kinds of stock, implements, domestic manufactured goods, &c.

LIST OF OFFICERS.

PRESIDENT.—William A. Mills.
VICE PRESIDENTS.—Holloway Loan James S. Walden, Daniel H. Fitzgerald.
TREASURER.—C. H. Bryan.
CORRESPONDING SECRETARY.—C. R. Bond.
RESOLVING.—Allen Merrill.
LAWYERS.—M. Brown, Mount Morris; S. W. Smith, R. H. Carroll, Groveland; W. H. Spencer, York; W. Wadsworth, Genesee; W. W. Wadsworth, Leites; Hector Hildreth, Canis; Edward A. Le Roy, Canis; John Gibbs, Lyons; John D. Pankins, Avon.
JURY COMMITTEE.—Cornelius Shepard, John Reuben Jones and Charles Col, Genesee; Alfred Hubbard, Morgan, Mass. Barter, Mount Morris; Charles Shepard, M. Scott, Wm. S. Fullerton, Morgan Hammond, Sparta; W. McNeil, John White, Wm. Ewart, Groveland; Abel H. Carter, John H. S. Tyler, Springfield; John H. Pierce, Horatio Dyer, Reuel Ashley, Springfield; John Henderson, James D. Gray, John Clark, Concord; John Halliway, James Dow, Am. Craig, John Leveet, John H. Newell, John McKay, Canbria; John Lay, T. H. Newell, John McKay, Canbria; John Lay, Asa Nowlin, Ira Merrill.

Wayne County Agricultural Society.

The Annual Fair of this Society is advertised to be held Newark on the 17th day of October. We have not seen all of the officers but they have published a respectable list premiums, and ought to have the co-operation and support of the farmers of Wayne. They can get up a good exhibition if they try; and now that aid is given by the State, surely will try.

The Drought.

According to our recollections, no drought as severe as the present one, has occurred in this district than the last thirty-six years. Periods of longer rain without rain to saturate the soil, perhaps we happened, but they have been later in the season, when the heat was less intense; and the greater length of the nights afforded some refreshment to the lands and pastures. The following statement may serve to show how seasons of similar character often cluster together: In fall of the year 1820, having been scant of water, our cattle, not only in that season but in several at preceded it, we dug a well nearly fifty feet deep, and found an abundant supply. So wet have been the summers since that time however, that we have never drawn a pulpit, having kept it closed as one of value; but it will now probably soon be opened. On other wells have become very low. The effects of the drought are not only visible in the streams, and the dusty surface of the ground, but

some trees are absolutely dying of thirst, and a few others dropping their leaves in autumn. Where the leaves simply fall, the branch will retain its vitality; but when they dry on the tree, it is dead.

Yet notwithstanding these appearances on hard uncultivated soil, wherever the ground has been mellow to a good depth, we have never seen young grow faster, or seem to suffer less with drought. Some peach trees in particular, have made great growth; and even now while the meadows and pastures are parched, their vegetation is in the height of its vigor.

Not less encouraging is the appearance of some field beets that were not forgotten. It has been well said that a man can produce more moisture by his hoe than by his pail; in other words, it requires less labor to keep up a healthy vegetation by making the ground mellow, than by carrying water. We think the truth of this proposition may be easily shown. If rich ground be well hoed once a month, it becomes a fountain of itself, to the plants that stand on it. Turn it up in the driest and hottest weather, it will be found moist; while a hard heavy soil will require watering every day.

A hard heavy soil cracks open in time of drought; exposes the roots to the sun and air; and allows the moisture from the depth of the fracture to evaporate. It possesses very little absorbent power. A light shower can hardly penetrate it from above, or the moisture rise up into it from below. On the reverse, a deep mellow soil never cracks open, exposes no roots, and the moisture that rises from below enters the whole mass of loose earth, and supplies the plants as they require it. But such a soil also imbibes moisture from the atmosphere; and like a sponge, yields it to the roots while it imbibes more. It is a perpetual though an invisible fountain.

Another cause however, should be taken into view. Every weed or blade of grass, operates like a pump to draw out and dissipate its moisture; and from this heavy low well cultivated ground is exempt. Further when decaying weeds are mixed with the soil, they increase its absorbent power, so that instead of diminishing, they add to its nutriment.

Perhaps some qualification to these remarks should be made on account of some plants requiring more moisture than others. While we were writing the above we have had fruit trees chiefly in view, round which the soil may be well cultivated without cutting the roots; but some other objects of culture, even with the best hoeing would scarcely produce good crops in a severe drought. We think indeed that all the soap suds from the wash-tub may be profitably applied to many plants in the kitchen garden at such a time as this; and that the cucumber, potato, and cabbage, would pay well both for culture and for drink.

Facts and Demonstrations, in Opposition to Speculative Opinions on the Culture of Silk.

MISSAS ERRORS.—Last week promised you some communication on the subject of Mulberry and Silk Culture, but incessant occupation has hindered me from fulfilling my engagement. You are aware of my reluctance to writing for publication. I am unaccustomed to it; and have felt a reluctance to add to the mass of speculative and inconclusive matter which has been thrown upon the public during the past ten years. I ask therefore due indulgence while I now proceed to comply with your suggestion, with all consistent brevity.

My farm of 86 acres lies within the corporate limits of Brockport, bounded upon the north by the Erie Canal, and situated in the southeast part of the village. Upon it is a mulberry plantation, occupying about six acres and consisting of about equal proportions of the

two species of Mulberry, best known viz: *Morus Alba* and *Morus Multicaulis*—commenced with both kinds in my garden in 1833 and upon my farm in 1836—adjacent to the plantation I have this season fitted up in a barn erected last season, partly with a view to this object—a economy, &c., embracing a loft and garret 42 by 72, a proprietary room on the first floor, and basement for leaves, in which is a furnace for keeping up a proper temperature in the feeding department.

The economy is fitted up with the feeding and spinning frame and apparatus, invented and patented last season, by Edmund Morris, Esq. of Burlington, N. J. The establishment altogether, furnishes pretty conclusive facts in illustration of the following propositions, viz:

That in Western New York, the culture of Silk, is a perfectly practical and profitable business:

That in order to render it so, reliance must be placed upon about an equal proportion of the *Morus Alba*, or some other hardy variety, and the *Morus Multicaulis*.

That the *Morus Alba* may be transplanted at any age not exceeding 7 years, (in my experience,) and that at any age after the 3d year, its foliage may be used with benefit to the tree—that by the best method of detaching the leaf, (pruning shoots,) it may be fed without injuring the tree until rendered unfit by frost.

That the *Multicaulis* on suitable soil and aspect, needs no protection from winter.

That its adaptation to the worm depends upon its management.

That it succeeds admirably by being grafted upon the root of the *Morus Alba*, upon soil and locations unsafe, where standing upon its own root.

That it may be transplanted, (roots one year old—) I have 11,000 plants done this season (between the 25 and 30 of June, when in full leaf, and now, 28th Aug., be used extensively for feeding.

That Morris' frames combine decidedly more advantages for insuring success, in the important operations of ventilation, (applied to each individual worm,) feeding and spinning, or winding, than any other system now known.

I have now feeding several hundred thousand worms in various stages from hatching (6 or, say 40,000 now hatching) to spinning, and of course, they will continue through most of September or later. I invite attention and investigation—and will be at all times happy to exhibit and explain to respectable strangers no anxiety seeking information, and to citizens, on Tuesdays and Fridays, between 8 and 11, A. M. and 3 and 6, P. M. Idle curiosity must seek its sources of gratification elsewhere.

I am joint proprietor with Mr. Morris, for the sale of his right for all the District of Western New York, being west of Genesee River, and prepared to furnish frames immediately. Apply to E. Morris, Burlington, N. J., or to me at Brockport—Letters must be post paid. Yours truly, GEO. ALLEN.

Brockport, Monroe Co. N. Y.
P. S. Aware of the effect of the reaction which followed the speculation in *Morus Multicaulis* plants; a few years since, I am prepared to meet with incredulity and approbation, and therefore refer for further facts to support my position, to the operations of Mr. John Adams, at Adams' Basin, on the Erie Canal, 15 miles west from Rochester, and 5 miles east of Brockport. Mr. Adams has made 50 bushels cocoon this season, at an expense of less than two dollars per bushel; and is confident that if he could have obtained suitable eggs for late hatching, (my own were received from Burlington, per mail 17th inst.) he could have materially lessened the outlay expenses. Mr. Adams has already reeled 10 lbs silk, which for luster and evenness will satisfy all who are competent to judge of its value.

Mr. Adams has used both kinds of Mulberry, and Morris' frames this season exclusively. His experience in feeding in the ordinary way, embraces a period of four or five years. G. A.

"A Report on the Herbaceous Plants of Massachusetts."

PUBLISHED agreeable to an order of the Legislature By the Commissioners of the Zoological and Botanical Survey of the State. Cambridge, 1841.

The Botanical Survey of the State of Massachusetts was assigned to two individuals. The trees and shrubs to E. B. Emerson, Esq., and the Herbaceous Plants to our esteemed fellow citizen, Rev. Chester D. Wey, Professor of Chemistry, Botany, and Natural Philosophy in the Berkshire Medical Institution of Pittsfield. (Now Principal of the Collegiate Institute at Rochester, N. Y.)

In making his report, Prof. Dewey has avoided the objection commonly made against Scientific reports; namely, that they are too technical and abstruse to be useful or interesting to common readers. He has adopted systematic and scientific arrangement, and at the same time made the descriptions popular and easy to be understood; and taken notice of facts of interest or importance to cultivators and others. So that the work is highly useful and interesting, not only to Botanists but to common readers.

The following notice of Indian Corn will serve as an example:

Zea. L. 19. 3. Indian Corn.

The Greek name of some kind of corn, from the Greek word to live, on account of its nutriment.

Z. mays. L. Mazz. Cultivated, but indigenous to America. It is more abundant at the South, larger, and more productive, and its flour is whiter and more excellent. The necessity of hot weather to verify this gain in this latitude, is well known and verified by the heat of the last summer, (1830) when the corn was, to a considerable extent, ripened at an early day in September, even in Berkshire County. It is probable that seed which would ripen earlier, or had become better adapted to the climate, was planted, and the favorable season early matured it.

There are many varieties of Indian Corn, of which *Maze* is the South American name; all of which may be reduced to one species. Some are far more hardy than the others. One of this kind is mentioned by Nuttall as cultivated by the western and northern Indians, and called "Early Mandan Corn." Some grow and ripen in England. The value of this grass is immense. Its stalks and leaves are excellent fodder for cattle.

Indian corn was introduced into England in 1562. The species *Z. Caragou*, W. Cross Corn, from Valparaiso, and which purches into a cross like form, is probably cultivated in some parts of the State.

As our corn is liable to be affected and sometimes cut off by a too early frost, it is important to obtain seed from a more northern section, which will be far more likely to ripen here. Though it may bear a smaller ear, the advantage is obvious. But, when the crop is injured by the frost, it was clearly ascertained a few years since, that more corn was ripened by cutting it up from the roots and placing it upright in small collections, than by leaving it to stand. In the latter case, the juice of the plant seems to be drawn to the root, in the former to be carried into the kernels on the ear, and to bring more of them to maturity.

The smut of *Maze* is *Uredo zeæ*, Schw., a fungus of dangerous properties. Only a little is produced in our country, and it is avoided by animals. It is said to have a deleterious effect on those who eat it.

In reply to the objection that many of the plants noticed "are nothing but weeds," the Professor makes the following interesting remarks:

Of the Useless Plants.

A large number of the plants which are considered useless, because they have yet no known application, are particularly described in this Report. They occupy space; they aid in covering the earth with vegetable life. They are, indeed, weeds, and often considered as mere nuisances. What is the advantage derived from them? What object is designed by them? Can any one be in truth, *useless*? Certainly not, is the reply to the last question. The others may receive the following answers:

1. The vegetable kingdom is the great means of purifying the atmosphere, so that it may sustain the animal kingdom. Respiration of animals and various operations in nature, produce such a change as tends to make the atmosphere unfit for its great office. Its

oxygen has become combined with carbon, or the residue of charcoal, and cannot be separated by the lungs so as to support life. This separation is effected by vegetables. They take up the carbon and restore the oxygen to the atmosphere. They do this as they grow in the air, and also as they grow in and under water. Provision is made for the absorption of carbonic acid by water, and thus food is supplied to plants, and life to animals. This is one of the most beautiful provisions in the economy of Divine Providence. It has sometimes been doubted whether vegetables were able completely to accomplish the object. None have maintained, however, that they did not operate largely and chiefly to this end. Even the general opinion seems to be strongly in favor of their perfectly effecting this purpose. To accomplish this object, vegetables must be spread widely over the earth. It might not be sufficient to depend upon the results of cultivation. Besides, the vegetables must be formed for growth through all the warm season of the year, and in all the variety of soil, situation, climate, condition. Plants that are directly useful would not be more likely to effect this end in all this variety; it is doubtful, indeed, whether the useful plants would be so well adapted to this state of things, as they generally require a more favorable combination of circumstances.

To secure this end, too, it is important that a host of plants should have no natural attractions for animals; that they only grow without molestation, and exert their influence upon the atmosphere without interruption.

This end is secured by the foliage of forests, which is chiefly removed from all access of destructive agencies.

It is a general fact that animals multiply nearly in proportion to the supply of food. If all vegetables were food for animals, the entire action of a great multitude could not be employed, as it now is, in purifying the atmosphere.

In this grand respect, all plants are performing a work of the highest utility. Unseen and silent, they renovate the very pulchrum of life.

2. Another end of the vegetable kingdom is food for the animal life. All animal life is ultimately supported from the vegetable world. But animal life is divided; tens of thousands of smaller animals, and especially of the insect tribe, must be dependent, as well as the larger animals and man, upon vegetables. By their foliage and seeds, the plants now considered as useless by many, may give far more support in the article of food, than is commonly imagined. We know that many small birds derive much food from seeds, as also a host of insects; and yet we may be in relative ignorance on this subject. Even the animals of the seas must have no inconsiderable dependence upon vegetable substances for their support. A great number of the oceanic vegetables must be annually poured into the great reservoir by all the rivers.

3. Plants enrich the soil, and fit it for the production of vegetables in greater quantity. This is true of vegetables generally, when they live and die and decay in their place of growth. Cultivation often exhausts land, because no adequate return is made for the vegetable matter removed from the fields. The vegetables, often considered useless, will, by their decay perform another important service, in enriching the earth, and improving the soil. It has long been remarked, that this effect follows, because the atmosphere contains the elements of vegetable matter, and plants derive their support from the air as well as from the earth. Experiment has proved that a plant will grow and flourish without any food except that obtained from water and the atmosphere. The reason for giving up exhausted fields to the growth of any vegetables for a few years, is philosophically and conclusive. Without the great fact of vegetables enriching the earth, the reason could not exist.

4. Many important properties and applications of these plants may yet be discovered and made, so that they may be seen to be more directly useful. Great discoveries have been made in this respect within the last fifty years. It cannot be doubted that the progress of discovery is only just commenced. The beautiful colors for painting, called *lakes*, are many of them obtained from vegetables and many more may yet be procured. Combinations too of vegetable matter may develop important powers. Without this, indeed, important uses have already been seen.

5. The beauty and variety of vegetable life are in themselves a useful end. In this way are displayed the wisdom, power, and contrivance of the Creator, the illimitable means at his control, the efficacy of the same ends by objects so diverse; the adaptation of means to ends; the constant supervision of his

agency; the ceaseless variety amidst surprising similarity.

These are reasons amply adequate to produce an interest in respect to all parts of vegetables. The purification of the atmosphere alone, and preserving it the duration of existence in a state to supply life, invests the world of vegetables with new attractions.

On the Importance of Systematic Cultivation.

"Hate not laborious work, nor the husbandry which most labor has created."—BIBLE.

Agriculture is the oldest art of which we have account. It was the occupation chosen by God for the first man, Adam. By it, nations and communities are kept together. It is the bond of union to unite all society. It is an art more conducive to health, and more strictly united with religious moral virtue than any other. It is important, that it should be well understood. It requires laborious work, and constant application. Inquiries into the principles of agriculture are like the key of knowledge, that will open unto us an extensive field for inquiry. Intelligent and patient observation disclose vast riches for the mind to delight in, and resources for physical happiness. As both comes by clear and disinterested views, or something that occurs in the universe, the inquiring cultivator of the soil may trace these laws, and assert correctly the theory of nature in the production and reproduction of plants; and when he practices this interesting inquiry, he will obtain the most probable results for his labor, both mentally and in the increased product of his lands. He will be a *scientist* or *natural farmer*.

Why not? Let every man understand thoroughly the fundamental principles of his own business. With a fund of knowledge many agriculturists acquire. Many farmers are contented to abandon their practice to their own taste and prejudices, without attempting to make serious investigation into the *science or principle* of their business, or of trying experiments, that they may be led to adopt improved modes of practice. Such farmers, though they may succeed in obtaining a living by their labor, will never advance in knowledge or wealth, or experience the happiness, dignity and independence, which is cultivated, under intelligent and systematic direction, so well calculated to produce.

Practice, to be beneficial to the land, and profitable to the cultivator, must be in accordance with nature; and so far as any success attend the labors of the most ignorant and careless, it is only because these laws have been partially observed. It is enough that a man was born and bred a farmer, to enable him to secure the most desirable results, for, may be, that his breeding has not been of the best order, or if he has been brought up on a good farm and his mode of culture produce him better crop, keep him land in better till, and yield him more profit than his neighbor receives, yet the experience others will be highly useful, for the field of enquiry larger; the knowledge obtained from good books, the record of scientific and systematic experiments conducted by farmers, as good, not to say better than himself, will be found highly serviceable to him.

When a man of superior genius applies himself to the art, experience shows us that he does it with greater ability, force of mind, industry, tact, a with more inventions, new discoveries, and various experiments; whereas, a common man confines himself severely within the common road, and to his ancient custom. Nothing opens his eyes, nothing raises him above his old habits, and after many years' patient labor, he still continues the same, without making any progress in the profession he follows.

One reason of the small produce of farms, and the small return to the industrious farmer, is, that agriculture is not generally regarded as an art, that requires *rules, method and study*. It has too long been regarded as a mere manual occupation. A man is called a farmer, and is thought to have performed his part, when all that he does is to plough, plant and harvest, without regard to rules or system. It is strange, indeed, that farmers, who, above all others, ought to understand the theory of soils, and the production of plants, and to observe the phenomena of nature in these particulars, as a means not only of adding to their knowledge, but to their ease and profit should neglect them most.

Experience is above all precepts, and makes even the feeblest we have committed confidence to our advantages, for from doing wrong, we often learn to reform. The experience, then, of the thousands of intelligent minds, who have elucidated and brought out truths,

subjects directly and indirectly bearing upon agriculture, is to be regarded.

A continuation of this subject, we shall endeavor to set out a good method to pursue, to enable us to get a natural system of cultivation. We must lay the foundation well, commence with primary principles and the results must be successful.

The Working-Man's Home Pleasures.

"I crown thee king of intimate delights,
Frisco's joys, man's home-born happiness,
And all the comforts that the lowly roof
Of modest rural retirement and the hours
Of long unintercepted evening know."
COWPER.

The family relation implies community of interest; there is a common stock, so there are common sorrows and common joys. Put a dozen of people together in a house, and let each lead the life of a hermit, this would be no family, even though they might have relations. There is more of domestic life in the sturgeon of a pocket-surgeon, where like arches, and little congenial groups are formed before voyage is over. The true glory of home is in the life of civilization; it is absent alike from the highest and the lowest. What can be more cheerless than the sullen selfishness of the Indian wigwag; or the relentless savagery wraps himself up in indigence, while the savage and child are spurned unworthy of a look—unless it be the elegant fashionable household of the prince or noble, where each is independent of the other, and has his rare equipage and peculiar friends. Compare with the life of the poor laborer, who returns at night to be welcomed by every human being, and by a domestic animal; who tells over, or knows, all occurrences of the day, and who feels that there is an interest which he does not share with every one and his.

There is more value than all believe, in the simple life, let family enjoyments be common to all. If a few are few who deny this, there are still fewer who upon it in its full extent. Something of it, as I said, there must be, to make a family at all. To occupy the same house, sit around the same fire, eat at the same table. It would seem childish, rare equipment, to do otherwise. But I am for finding the matter much further, and for knitting closely together those who cluster around the hearth; believing that every influence is evil to sever father from child, and brother from brother. The morsel that is eaten alone becomes sooner for a bitter morsel.

Members of the same household should feel that are dependent on one another, and should be as ready to ask, as ready to give, assistance. Each should in the morning with the impression, that no duty a day is more urgent than to make every individual happy, with whom he is brought into contact. This contact should be sought not shunned. It is the members of the same household are the members of one another. I do not, of course, allude here to one horrid instance of unnatural, brutal treatment, persons of the same blood, daily gathered and the same bond, refuse to speak to one another, malice and envy must rankle deeply where this is the case. I refer to a more common fault, which sometimes exists where there is a degree of affection, but where the members of a family pursue separate pursuits and separate pleasures. The morning meal is swallowed with little interest. When it is done, each hurries to his or her line of employment. The mother is busy in the kitchen, the father in the shop, the sons go to school, the daughters might do well enough, if it were confined to business, but it becomes the habit of hours of leisure. The father has his evenings; and the sons are seldom with a door (at a late hour), and too often, who most needs the cheering influence of the family circle, the mother, is left to her own lamp, with the cradle moving at her feet, during those hours in which her children are laughing or singing among their young company. All this is highly undesirable. The evenings of the industrious family may be, and ought to be, the most delightful seasons of joint satisfactions. If we must have evening parties of friends, let there be a mingling of sexes and ages. The presence of the old may to a degree neutralize the mirth of the young, in the same proportion the aged will be won over. This preëminent and assuring society, like a well-packed bag in a shop, is becoming too common in my judgment injurious. The young folks get too old together; and the children must be together; and if mothers go on thus, we may live to see parties of greybeards and parties of sucklings. No!

wherever it is possible, let the family chain be kept bright and whole. In the households of the industrious, it is entirely broken often enough by separation at work during the day.

Instead of this living apart, which engenders selfishness and moroseness, I have to see the members of families flung together, like cannonball drops. There are some houses in which no one makes a confident of another; it one would learn the secret of his brother, he must go abroad for it. This is unnatural, and wholly evil; incompatible with the frankness of simple love. Show me the father often walking with his sons, and these sons often with one another, not in business merely, but in sports; and I shall think I see a virtuous and happy household.

There is one particular in which the principle I have laid down may have a very important application. I mean the cause of mental improvement. The mind should have, as far as possible, let the pursuit of knowledge in every family be a joint pursuit. For many reasons this is desirable in every house, but it is almost indispensable in the house of the working-man. It wakes up the spirit of improvement; it saves time and expense, and it gives tenfold zest to the refreshments of leisure. To take one of the simplest instances, I would, in two words, say to every working-man, *Read aloud*. If the book is borrowed, this is often the only way in which every one can get his share. If the family is very busy—and the female members of all industrious families are as much so in the evening as in the day—the reading of one will be as good as the reading of all, and while one reads, a dozen may knit or sew. There are many persons who enjoy much more and retain much better what is read to them than what they read themselves; to the reader himself, there is a great difference in favor of reading aloud, as it regards the impression on his own mind. The members of the circle may take turns, and thus each will have a chance of learning, what so few really attain, the art of correct and agreeable reading. Occasion is thus offered for questions, remarks, and general discourse; and it is almost impossible for conversation to flag, where this practice is pursued. With this method, the younger members of a family may be saved in a good degree from the pursuit of frivolous and hurtful books; and, if a little foresight be used, a regular course of solid or elegant instruction might thus be constantly going forward, even in the humblest family.

But the moral and social effects of such a practice are not less to be regarded. Evenings thus spent will never be forgotten. Their influence will be daily felt in making every member of the circle more necessary to all the rest. There will be an attractive charm in these little friendly associations which will hold the sons and daughters back from much of the wandering which is common. It will be a cheap, wholesome, safe enjoyment, and it will be all this, at home.

The gains of an affectionate family ought to be shared and equalized; the remark is true of all degrees and kinds of learning. Study has a tendency to drive men to solitude, and solitude begets selfishness, whim, and moroseness. There are some households in which only one person is learned; this one, however amiable, has, perhaps, never thought of sharing his acquisitions with a brother or a sister. How seldom do men communicate what they have learned to their female relations; or, as a man once said to my hearing, "What he tells to his wife!" And yet every one would be, by dropping a word here and a word there, for even a philosopher to convey the chief result of his inquiries to those whom he meets at every meal. I have been sometimes surprised to see fathers, who had made great attainments, and who, therefore, knew the value of knowledge, abstaining from all intercourse with their sons, upon the points which were nearest their own hearts. In families where the reverse of this is true, that is, where the pursuits of the house have been a joint business, it is common to see a succession of persons eminent in the same line. Thus, among linguists, the Buxtons; among painters the Vernets and the Pentons; among musicians, the Carriers in literature, the Edgeworths, the Taylors, and the Wires.

There are some pleasures which, in their very nature, are such that they may be given to give a charm to the working-man's home. This is more true of nothing than music. Harmony implies a concurrence of parts, I have seen families so trained that every individual had his allotted part or instrument. Let the thing, however, be conducted by some rule. If proper pains be taken with children, while they are yet young, they may all be taught to sing. Where circumstances favor it, instrumental music may be ad-

ded. It is somewhat unfortunate that American women practice almost entirely upon the more expensive instruments; and it is not every man who can or ought to give two hundred and fifty dollars for a piano-forte. In countries where the guitar is a common accompaniment, it is within the reach of the poorest. There may be lovely music, however, without any instrument. The most exquisite music in the world, I mean that of the pope's Sistine Chapel, is known to be such. There is great room for selection, however, both as to music and words. It is the height of folly to buy every new thing which comes from the music-sellers. So far as words are concerned, a full half of what they publish is nonsense, or worse; and I have blushed to see a young lady turning over what she very properly called her "house music." Those persons, therefore, deserve our thanks who from time to time are publishing in a cheap form such secular music as is proper for families. I have referred chiefly to such works as Kingsley's Social Choir, Mason's Odeson, and the Boston Glee Book.

But, after all, and without any reference to religion, the best music is sacred music. It is on this that the greatest masters have laid out their strength; it is this which most suits the chorus of mankind. Secular pieces, as commonly published, are intended to be sung by two, or by a single voice; but sacred compositions admit of the strength of a whole company. And it is truly delightful to drop into one of those families where the evenings are sometimes spent in this way. There is the eldest daughter at the piano-forte, accompanied by the eldest son upon the violin. Another son and two daughters lead off vocally, with the principal melody, while a neighboring youth plays the tenor, and sings the same part. The old gentlemen in spectacles labor at his violinello, and two or three ladies come in readily to complete the orchestra; while nieces, nephews, cousins, friends, and, perhaps, suitors, fill up the sounding chorus with right good will. This is, indeed, something more than a mere family meeting, but it is what grows out of it; and when the evening ends, and some little refreshments have gone around, the transition is not abrupt from this to the social worship, when all voices join once more in a happy evening hymn.—*The Workingman*.

For the New Genesee Farmer.

MORN.

BY D. W. C. ROBERTS.

Whistling far through ether, springs
The early lark on soaring wings;
The soft-mists of midnight flee
With the dews of grass and tree
As Morn, all decked, and smiling led,
Peers o'er the mountain's distant head.
Let her chariot's joyous train
Sweep the heavens' cerulean plain!
Flowers, gemmed with diamond dew,
All the crystal pavements strew;
Airs of richest fragrance blow,
Floods of rarest music flow;
The merry song of chanticleer,
And low of kine, fall on the ear:
The milkmaid, singing, seeks her cow;
The Farmer hastens to the plough,
Thus life and joy, on every hand,
Prevail when Morn comes o'er the land!

Buckthorn Hedge.

If any gentleman wishes to see a beautiful buckthorn hedge, he may be gratified by stopping at the residence of the editor, in Cambridge. We are satisfied, from our own experience, that farmers might adopt this mode of fencing enclosures with success. It would be a perfect protection against all animals that usually trespass on their grounds. The plant is not only useful for this purpose, but is highly ornamental. No worm or borer attacks the root or stem; no insect preys upon the foliage. It is also of rapid growth; and in six years it may be raised from the seed to a state of maturity sufficient to afford the protection required. And the best recommendation of all is, perhaps, that it will last as long as its owner or his heirs may need it. Our plants were procured six years ago, from Mr. Derby, of Salem, who it is well known, has a specimen of the hedge which surpasses any thing of the kind in Massachusetts.—*Boston Courier*.



ROCHESTER, SEPTEMBER, 1841.

Grand Agricultural Fair at Syracuse,
ON THE 29TH AND 30TH OF SEPTEMBER.

The arrangements and regulations for the N. Y. State Fair will be found on page 132 of this paper.—(The list of premiums was published in our July number.) Judging from the preparations which are making, and the general interest which is manifested in the subject, we are confident that this exhibition will be a grand affair—worthy of the farmers of the Empire State. We will not insult the good sense of our readers by offering any arguments to convince them that they will derive both benefit and pleasure from attending this Fair, for we believe every intelligent farmer is aware of it; and we trust every such one who can, will be there. Those who cannot or will not go are more to be pitied than blamed; for their's will be the loss. But we wish to remind our readers that if they intend to go, and expect to be benefited thereby, it is their duty, to contribute something to the common stock. They ought to join the Society, and pay at least their dollar, and if possible carry something for exhibition. The Executive Committee have placed much reliance on the farmers of the Western Counties for aid in getting up this Fair, and if they are disappointed the reputation of Western New York will suffer. Those who live near the line of the canal can easily transport animals to Syracuse from almost any distance; and those who cannot send animals should send something else, so as to help to give interest and variety to the show.

Two Packet Boats and two trains of Rail Road cars leave Rochester daily for Syracuse—both pleasant, cheap, and expeditious modes of travelling.—Quite a number of farmers in this vicinity have already expressed their determination to attend—we expect to see at least a boat load from Monroe.

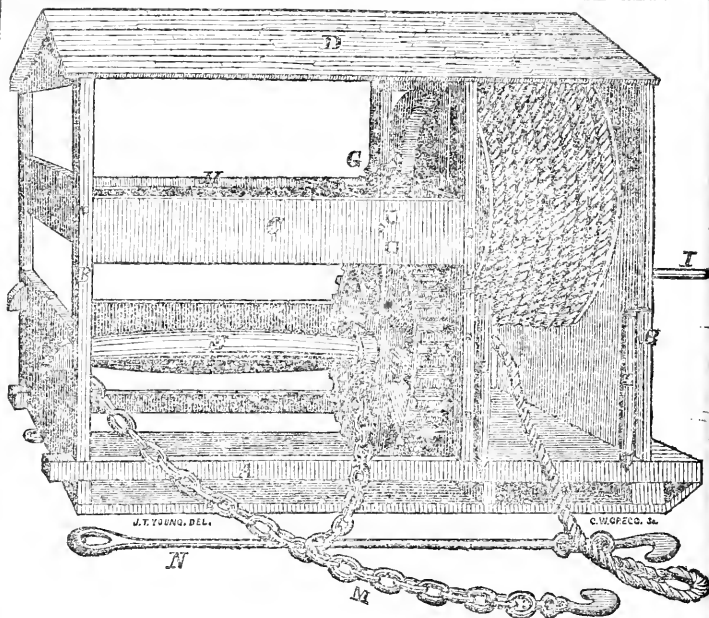
M. B. MERRIMAN, of the Rochester Steel-Store, it will be seen is appointed one of the Committee of Arrangements. He will be happy to receive the names of members for the Society, and those in this region who intend to exhibit animals or implements, are requested to notify him thereof, previous to the 20th inst.

Devastative Hail Storm.

A most destructive storm of hail occurred in this vicinity on Sunday afternoon, Aug. 29th. It commenced about three miles south of the city, and passed off in a North-Easterly direction, over a space about seven miles in length and one in breadth. The hail stones were very large; many of them measuring from 1 to five inches in circumference; and being accompanied with a gale of wind their force was very destructive to windows, gardens, Orchards, and crops. The devastation commenced near the County Poor House, in which building it destroyed 55 lights of glass. The fine new green in use of Edwinger & Barry, near Mr. Hope, had almost every light of glass broken, amounting to nearly 2,000 feet; besides which great damage was done to their choice stock of plants, and young fruit trees. (Their building was partly destroyed by fire the following day!) The loss sustained by these enterprising young men is very severe, and much to be regretted. Passing over the eastern part of the city, the hail broke the windows of numerous dwellings, including the Seward Seminary, Alexander's Tavern &c., and greatly injured the fine gardens and orchards which abound in that vicinity. Several market Gardeners have lost nearly all their crops—the reward of a whole season's labor. Mr. Sweeney of Brighton, had about \$1,000 worth of peaches and apples decayed. Messrs. Pitkin,

Woodman, Hayward, Culver, Lockwood and others have also sustained great loss of choice fruit. Mr. C. Croaman has lost a large portion of his crops of garden seeds &c. It is said that birds, and even geese were killed by the hail; and some cattle in an open field, which were slaughtered in the evening, were covered with the marks of bruises, when their sides were taken off. Watermelons were brought in

to town the day following, some cut entirely open with the hail, and others with holes in them, showing where the stones had entered. The crops of corn and potatoes were nearly too far advanced to be destroyed, although late pieces are much injured—the leaves being literally cut into shreds. Such a storm was never known before in this region, and we hope may never be again.



STUMP PULLING MACHINE.

Having been repeatedly requested to publish a description of a Machine for extracting Stumps from land we have, at considerable expense obtained a description and engraving of the most efficient one for this purpose within our knowledge. The above representation, admirably drawn and engraved by two young artists of this city, will convey so accurate an idea of the machine that but little explanation is necessary.

A, the sills on which the frame work is erected; the side ones 7½, and the cross ones 4 feet long, made of 5 inch square timber. Under these sills are three more cross sills under which planks are fixed with the front end turned up like the front of a sled or stone boat, to facilitate the removal of the machine by dragging over the ground. L L B, the upright posts, three on each side 4 feet high, 3 by 4 inch stuff, the middle one standing 2 feet from the front and 4 feet from the rear of the machine. C, girths 12 inches wide, 2½ thick, framed into the posts. Several short girths of this description are framed across the machine and contain iron boxes for the shafts to turn in. D, the roof or cover, with 1 foot slope to protect the machine from wet. E, a large cast iron shaft 4 feet long, 5½ inches in diameter at the ends and swelled to 4½ in the middle, on one end of which is a strong cast iron spur wheel (F) 2½ feet in diameter, with 54 cogs. G, a pinion wheel 7½ inches in diameter, with 9 cogs to mesh into the spur wheel, and placed on a wrought iron shaft (H) passing through the whole length of the machine, 2½ inches square near the pinion wheel, but tapering towards each end. I, the crank, outside, in front of the machine, on the end of the wrought iron shaft, by which to wind up the slack of the rope, and at the same time unwind the chain. K, a wooden drum, 3½ feet in diameter, and 1½ wide, attached to the shaft by iron arms, around which winds a strong rope 1½ inch in diam-

eter, 150 feet long, to the end of which the power is applied. LL, two rollers to prevent the friction of the rope against the sides of the machine.

The chain, M, is attached to each end of the iron shaft, by a strong bolt and screw, and extends about 1 foot double, where it converges together and is united by a triangular link and then extends single 4 feet further and terminates with a hook and swivel as shown in the engraving. The chain must be very strong, made of the best of iron, the single part of 1½ and the double 1½ inch wire, the links small and short like ship cable. Another strong chain 10 or 12 feet long, with a hook one end and a ring the other, is placed around the top of the stump intended to be extracted, and this is connected with the chain attached to the machine by a number of connecting rods (N), made of 1½ inch iron, 10 feet long, with a strong hook one end and an eye the other, as represented above. There should be a sufficient number of these rods to extend 100 feet or more. These rods cost less, and are much easier handled than heavy chains.

Now go on the other side of the machine, and on the upright posts, level with the large shaft you see two strong rings attached to heavy plates of iron reaching to and forming boxes around the ends of the shaft. To these rings two strong chains are attached by which the machine is anchored to a stump or some other immovable object. It will readily be seen that the power acts as much on one side of the machine as

other, and consequently it must be firmly secured to prevent its being displaced or turned over. By passing the chain around the top of the stump to be extracted, and anchoring the machine to the bottom of one on the other side, the former will give way, although it may be larger than the latter. The first plan is to commence operating near the outside of the lot, and after fastening the machine to a firm stump, extract all within reach of the chains, leaving only one good one within reach to which it may next be fastened in order to extract the former one. If it is desired to extract a stump where there is no other to which to fasten the machine, a hole must be dug in the ground and a strong post set in it, well up to the top on the side towards the machine; tie the chain around it close to the ground, and if the stump is not very strongly rooted it will come out without much trouble.

The manner in which the machine operates must appear obvious to all. A yoke of oxen draw on ropes; this turns the drum and the small wheel, that turns the large wheel and shafts to wind the chain very slowly but with immense power. A single yoke of oxen drawing on the rope gives a power equal to thirty-five or forty yokes on the chain; but something must inevitably give away. It will readily be seen that the machine must be well made, the chain very strong, especially if large and fully rooted stumps are to be pulled.

This machine was a good deal used in this State 10 or 12 years ago, but we have not seen or heard of it of late. It was called "Pratt's Patent Stump Extractor." A Mr. Drake, we believe, was the proprietor of the right in this State; but whether the patent or the patentee, is alive now, we have not been able to ascertain. We will endeavor to give information on this point next month. One of the machines has been seen on the farm of Mr. Whitney near this place, from which the above drawing was taken. If any person within a few miles of this place desires to see it, it can be readily be hired on reasonable terms.

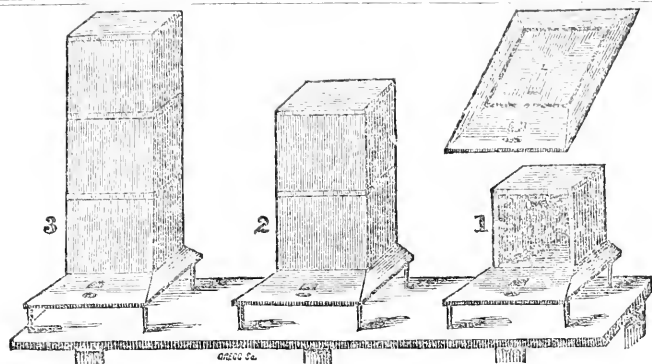
It weighs about 1500 pounds and is hung on waggon wheels so as to be conveniently transported. In an old paper handed us by Mr. Whitney, an engineer on the Cleveland Canal certifies that one of these machines extracted 65 stumps between 2 o'clock and 1 o'clock, and on another section 250 were extracted in one day. Another certificate, signed by eight persons, states that they saw this machine with a yoke of oxen, extract 17 white pine stumps of good size in 52 minutes, without any of the roots being previously cut; and remove a barn 22 feet square containing about 2 tons of hay and grain, with only a power of five men applied to the rope. Another states that a large green pine tree, measuring 12 feet circumference and 150 feet in height was drawn down by this machine, the chain being applied 22 feet on the ground. The depth of soil broken up by the use of this was between five and six feet, and the surface 22 by 35 feet.

Autumnal Planting.

A friend has requested us to caution our readers against planting out trees in the fall of the year in these places. When the hole is dug, it holds water in a tub—the tree is put in and there amongst loose earth it has to soak till spring. Hardly indeed, must be the one that can bear it. In our last volume, page 18, we mentioned a remarkable case of this kind, with the complete success that followed and returned; and we can now state another: Last fall, the present Corresponding Secretary of the Cayuga County Agricultural Society planted shade trees in front of his new mansion in Auburn, part in a sandy loam and part in a heavy clay. All the latter died, and all the former lived.

A trench sufficiently deep may be made with the plough, by turning out the earth from the same line several times in succession. When the bottom of the furrow is made smooth, straw, corn-stalks, potato-tops, chips, brush or old rails, may be laid in, the

trees planted, and the earth returned to its place. With a proper doer, all the workings of the ground will pass off, and the trees will be fully established in the soil before those at some decay; but even then, the soil will be a spongy through which the water can percolate.



THE SUBTENDED BEE-HIVE.

We some time since acknowledged the receipt of a little work entitled, "Bee Breeding in the West," by Thomas Atlee, Editor of the Western Farmer & Gardener; and having given it a careful examination we find it so interesting and instructive that we make some extracts from it. The main points at which the author aims, are, 1st, Preventing the depredations of the moth or worm, and, 2d, Obtaining the surplus honey without destroying the bees. These advantages he contends can best be secured by the use of the *Subtended Bee-Hive*; and his arguments are the more convincing from the circumstance that his object is not to favor any patent right, or maker of bee-hives; for the invention he describes is not patented, and he gives directions by which any common joiner can construct the hives. He points out several objections to the different "improved hives" now in use; the principal one of which is, that they compel the bees to work upwards, while their natural habits always lead them to work downwards. This point he requires should be kept constantly in mind, and contends that no joiner can long prove successful who practically disregards it; as by repeatedly robbing the bees of the new comb and compelling them to breed successive swarms in the old, the progeny will inevitably deteriorate in size. We should like to hear the opinions of those who have long used the Vermont and similar hives, on this subject. But to the work:—

When the bee is left to itself to seek a home in the woods, it pitches upon a hollow tree or a crevice in the cliffs, and commences at the extreme top, there forming its first comb. As the cells are formed, the Queen Mother deposits her eggs in them, regularly using the new ones for this purpose, and that only once; she rarely places an egg in the same cell a second time, so long as there is space for the formation of new ones. So soon as the young bee leaves the cell, the workers clean it out, removing everything but the royal robe, or white covering within which the larvae underwent its transformation, which is pressed down to the bottom and covered over with a thin coat of wax. This, of course, diminishes the size of the cell, which is then used for the reception of honey; while the succession of eggs, as before remarked, the Queen's instinct teaches her to deposit in the newly formed, full sized cells. So long as her supply of food is abundant, and sufficient space is allowed them below, they go on increasing; but to what extent has not yet been determined. It seems probable that there must be a limit to the procreative powers of the Queen; and as no two queens can exist, in a state of freedom, in the same hive, all plans which are intended to prevent their following their natural mode of increase—by swarming—must end in failure.

They thus go on, as is their habit both in a wild and domesticated state, working always downward, leaving their winter's store of honey at the top of the hive, and congregating with their Queen, round those cells which contain their eggs and larvae.

It was his observation of this fact, that such was their invariable practice, that led the French writer, to whom I am indebted for the first idea of the subtended hive, and who originated the two storied hive, to adopt the plan of adding his boxes below, and allowing the bees to follow their natural course. In his treatise he remarks, that "it is evident, if we intend to rob bees, thus lodged in a hollow tree or cleft of a rock, without injuring them, we must attack the hive at the top. There the combs are easily removed, because the bees have left them, and are busily

engaged in the lower part of the hollow or crevice, and do not even perceive the theft; nor do they suffer by being deprived of these upper combs, which have become superfluous by the new stock of provisions, which they go on, insidiously accumulating, in their unintermitted descending operations. Here the whole secret of nature is laid open—how to rob them without doing them the least injury!"

Those who have adopted the plan of adding an empty box on the top of the permanent hive, think they have made the same discovery, and that they are acting up to it. But they overlook, in their method several most important facts—that it compels the bees to breed, year after year, in the same box; and of course they must use the same cells for the repeated hatchings, which thus become continually diminished in size, by the addition of two or three royal robes in a season; until the difference between the bees from such a hive and from a thriving young one, is apparent to the most careless observer. Then, when so managed, they breed but little; the swarms occasionally thrown off are weak and inefficient, and rarely exist through the first winter unassisted.

By a careful comparison of the young bees from an old hive, the cells in which have become much diminished in size, with those from fresh hive, the difference in their size and thrifty appearance will be at once perceived. New honey, or that which has been made the same season, though both whiter and fairer to the eye, is neither so fine flavored nor so wholesome as that which has undergone, as it were, a tempering in the hive. In a good, thrifty hive, there is just that degree of heat kept up that is necessary to prevent the honey becoming candied in the cells—if once allowed to get into that state, age does not improve nor affect.

If the farmers of the west will think of these things, and bestow a few of the many hours which they now throw away in idleness, on the care of a few stands of bees—acquire a knowledge of their nature and habits, and apply that knowledge judiciously, in the management of them—sowing small patches of such

plants as nigricorn and white clover, to yield them pasture—they would improve their condition as men, and already to their own wealth, and save annually to the country a fine millions of dollars that are now lost.

The certain destruction occasioned by the moth, if it effects a lodgment, is the principal and most serious bar to successful bee-breeding in this region at the present day.

Numerous plans have been published for their prevention, some of which were good—others worthless. The only ones that have been successful, are those that have had for their object the entire exclusion of the moth; and the keeping each hive in a strong, healthy condition, in a box or hive proportioned to their strength, so that they were enabled to defend themselves from all invaders.

In adopting a plan for the keeping and management of bees, several important points must be considered. It must combine simplicity with convenience; and cheapness with durability. It must allow of the inmates proceeding in their own natural way; of the proprietor removing honey when it can be spared, without disturbing or injuring the bees. It must afford them; during winter, a warm and dry habitation; and in summer a cool and airy one. Its entrances must be so arranged, as to allow the bees a free passage, and yet enable them to defend themselves from enemies. It must afford, with a reasonable degree of care, complete protection against the moth, and finally, and for putting two or more weak swarms together, where they come off late in the season. And it ought to give the proprietor control over his bees, as perfect as the nature of the insect will admit of.

All this and more can be attained by the use of the

SUPPERED HIVE.

It is a simple and economical plan; of easy management; and one within the means of any farmer who can handle a saw, a plane and a hammer.

The boxes of which it is composed, are formed of good, well-seasoned pine plank—free from knots and wind-shakes. It ought to be at least one inch thick. The boxes may be ten, eleven or twelve inches square, in the clear. Let the plank be dressed on each side, and pointed on the edges, so as to fit close, without being tongued and grooved. Before nailing them together at the sides, lay a thin strip of thick white lead paint on the edge to be nailed, which will render it impervious to the invasion of the moth. In the top cut two semicircular holes at the front, and two at the back, of one inch and a half in diameter—the straight side being in a line with the back and front of the box, so that the bees may have a straight channel from one story to the other. Cut out the top on without any layer of paint, using a circular saw, and cut it so that it may be taken off to facilitate the removal of the honey. Give the outside of the box two coats of white lead paint, all except the top; and let it be done so long before it is necessary to use it, as that the smell may be dissipated, as it is very offensive to the bees. Pour a little melted bees-wax, while pretty hot, over the inside of the top, which will enable the bees to patch their comb much more freely. Let three-quarters of an inch of the thickness of the lower edges of the box in the inside be beveled off, so as to leave but about one-fourth of an inch of surface to rest upon the stand—this will afford less shelter for the eggs of the moth.

We will suppose the boxes, thus made, to be a cube of twelve inches inside. In that case, the tunnel stand will be made thus. Take a piece of two inch plank, free from knots and shakes—what carpenter's term *clear stuff*; length 26, and breadth 18 inches. Ten inches from one end, and two from the other and from each side, is marked a square of fourteen inches. From the outside of this square, the board is dressed off, with an even slope, until its thickness at the front edge is reduced to half an inch, and at the other three edges to about an inch. The square is then reduced to twelve inches, in the centre of which is bored an inch nigger hole; to this hole the inner square is also gradually sloped to the depth of an inch; thus securing the bees from any possibility of wet lodging about their hive, and affording them free ventilation. There will then be a level, smooth strip of one inch in width, surrounding the square of 12 inches, on which to set the box or hive. Two inches from the front edge of the stand, commence cutting a channel two inches in width, and of such a depth as to carry it out, on an even slope, half way between the inner edge of the hive, and the ventilating hole in the centre. Over this, lay a strip of wood as neatly as possible, dressing it down even with the slope of the stand, so as to leave a tunnel two inches

in width by a quarter of an inch in depth. Under the centre hole, and over the outlet of the tunnel, hang small wire grates, the one to prevent the entrance of other insects; and the other to be thrown back to permit the exit of the bees, or fastened down to keep them at home in clear, sun-shining days in winter. For fast to the stand, use four or five inch screws, screwed in, from below, far enough to be firm. The lower side ought also to be planed smooth; and the whole should have two coats of white paint some time before it is wanted.

Rotation of Crops.

This is a subject of great interest to the Farmer. And yet few points in Agriculture are less understood. The importance of the systematic rotation in crops is nowhere set forth in briefer or clearer terms, than in one of the Agricultural lectures of Dr. Daulaney, Professor of Rural Economy in the University of Oxford. (By the bye, why are our American Colleges so destitute of instruction in that branch of knowledge?) Annexed is an extract from that discourse; an extract which, if properly appreciated by our farming readers, will alone be worth more than the cost of the New Genessee Farmer for an ordinary lifetime.—Read it, my friend—reflect on it—and guide your operations by the important principles which it develops:

"Those plants ought to succeed each other which contain different chemical ingredients," says the important theorist, "so that the quantity of each which the soil can in any given time contain may be absorbed in an equal ratio. Thus a productive crop of corn could not be obtained without the phosphates of lime and magnesia, which are present in the grain, nor without the silicate of potash, which gives stability to the stalks. It would be unjudicious, therefore, to sow any plant that required much of any of the above ingredients, immediately after having diminished the amount of them present in the soil by a crop of wheat or of any other kind of corn. But on the other hand, leguminous plants, such as beans, are well calculated to succeed to crops of corn, because they contain no free acids, and less than one per cent. of the phosphates. They thrive, therefore, even where these ingredients have been withdrawn; and during their growth afford time for the ground to obtain a fresh supply of them by a further decomposition of the subject rock. For the same reason, wheat and tobacco may some times be reared in succession in a soil rich in potash, because the latter plant requires none of these phosphoric salts which are present in wheat. In order, however, to proceed upon certain data, it would be requisite that an analysis of the plants most useful to man should be accomplished in the different stages of their growth, a labor which no laborer can in any partially undertake. It is a curious fact that the same plant differs in constitution when grown in different climates. Thus, in the beet root, nitre takes the place of sugar when this plant is cultivated in the warmer parts of France.—The explanation of this difference is probably as follows: Beet root contains, as an essential ingredient, not only saccharine matter but also nitrogen; and it is probable that the two are mutually so connected together in the vegetable tissue that the one cannot exist without the other. The nitrogen being derived from the decomposition of ammonia, must be effected by any cause which diminishes the supply of the latter, and in proportion as this ingredient is wanting, the secretion of sugar will likewise fail. Now it has been shown by Liebig that the formation of ammonia is owing to the decomposition of ammonia; and it is conceived by him that the last products of the decomposition of animal bodies present themselves in the form of ammonia in cold climates, and in that of nitric acid in warm ones. Hence in proportion to the amount of nitric acid formed, and of nitre absorbed by the plant, that of the nitrogen, and consequently that of the saccharine matter present in it may be diminished.

By order of Government, the roads in Prussia are lined on each side with fruit trees. Noticing that some of them had a wisp of straw attached to them, I enquired of the coachman what it meant. He replied that the straw was intended as a notice to the public not to take fruit from those trees without special permission. "I fear," said I, "that such a notice in my country, w'd be an invitation to attack them."

"Habens six keins schulen?" (Have you no schools was his significant rejoinder.—Prof. Stowe.

From the New England Farmer.

Early Suppers.

By late suppers I do not mean a fourth meal, such as is often taken in fashionable life, for I have seldom known our plain agricultural families addicted to this practice. They leave it chiefly to the inhabitants of large towns and cities, to go to the closet at 9 or 10 o'clock in the evening, when they ought to go to bed and take a meal of cold ham or tongue, and bread and butter, or something else quite as difficult of digestion.

But by late suppers among our farmers, I mean the usual third meal, deferred to an unreasonable hour—to 7 or 8 o'clock, or even later. I have known many a farmer who made it his constant practice at all seasons, to work as long as he could see, and not to take supper till his work was finished; consequently his supper for supper, during a part of the season, would be from 8 to 9 o'clock, never earlier than 8 o'clock when the fields were but a little distance from the house, he late as nine.

The best and most thriving farmers I have ever known, however, take supper at precisely 6 o'clock, even in haying and harvesting. I know that a thousand objections may be brought to such early hour, especially in the month of June, July and August; but I know too, they can be met.

Some years since, having finished our haying, (I resided then in New Coventry, Conn.) I took my scythe and went into the employ, for a short time, of David H. Warner, in Litchfield county, whose grass was rather later than ours, and consequently was not yet cut all. At that time I had not known of any other way than to work till dark and eat supper when we could.

But Mr. Warner had supper uniformly, at six o'clock. Whatever the weather might be, and how ever pressing the work might seem to be, he required us all, at six, to suspend work and "come to tea," as it was called. This consisted of a light repast; wholesome and perhaps rather too solid, or I might say heavy, but not luxurious. When this meal was finished, which occupied, including a little conversation, about half an hour, we were permitted to go to work again if we chose. In general, however, all we did was to grind our scythes and get ready for the next day.

I do not say that when, by some unforeseen occurrence—an accident or a shower—a very pressing necessity seemed to exist of deferring supper half an hour to get in a load of hay or oats, it was never done; for I believe it was so; though I saw nothing of the kind while I was there. It takes no longer to grind scythes at evening than it does in the morning; and Mr. W.'s workmen were ready to go to mowing in the morning, in the cool of the day, and while the grass cuts easily, instead of being compelled to spend a part of the best of the morning in making preparations which might have been made the night before. And having been betimes and got ahead of their day's work, they were not obliged to mow so late in the forenoon in the great heat. As soon as the ground and swath were dry enough to spread, their mowing was finished for the day, and they were ready to attend to it. And thus by being an hour or two earlier in the morning, and by keeping before their work, they found it as easy to get through at six, as others at eight.

But there are other and numerous advantages which are enjoyed by those who take supper at six.

1. They are not quite so apt as others are to over-eat. Our farmers especially those who do not take any luncheon in the afternoon—and there are some who do not—and who do not get ready to sit down to supper till 8 or 9 o'clock, are very apt to eat too much. Some, it is true, lose their appetite, instead of having it increased, but these cases are not very numerous, and are diminished somewhat by the custom of taking something to give an appetite. My old friend, Levi Atkins, used to defend the practice of taking a little spirit before supper, to give an appetite—but this was before the temperance reform commenced.

2. They do not so often go to bed with a load on their stomachs. He who eats at six, besides eating less in quantity, is not so apt to go to bed till nine, by which hour his digestion is fairly through. Whereas he who takes his supper at eight or nine, and goes immediately to bed, is apt to have a mass of food in his stomach either undigested or but half digested, for a considerable time; and is apt to toss in bed and dream a good deal, or else sleep too soundly.

3. And what is a natural consequence of this overloading the stomach, he who sups late, gets up with a

4. There is one more advantage which I must not pass over, which is worthy of consideration, and which is highly in favor of early suppers. It is, that by taking our repast at six o'clock, we may have the society of the female portion of the family. They will sit waiting for their supper till eight or nine o'clock, or at least many will not, and none of them ought. But they will wait till eight. Need I say that such a custom would be as favorable to good manners as it could be to true enjoyment? Besides, we are apt to approach them now-a-days, with retaining their tea, to excite their nerves; while they demand of us to surrender our cider;—how do we know that they would not, for the sake of our society at six, dispense with the tea? Is not the experiment worth trying? I have not exhausted the subject, Mr. Editor, but my clock is full, and I may have exhausted the patience of your readers. Yours, &c.,
Dedham, July 12, 1841. W. A. ALCOTT.

For the New-England Farmer.

CORR. LAWS.

I am a plain man, and hate controversy,—but one of two things of "S. W." I think I ought to object to, as I cannot, being a reader of the Farmer, silently let it pass. I was indeed greatly surprised to find a dozen of Western New York, the advocates of a hereditary aristocracy; and attributing the payment of the rest of the English taxes, and even the support of "TAX PEOPLE" to them. The "landed interest" it remembered, is nothing else than the interest of number of petty monarchs, whose ancestors obtained their possessions by conquest or force, and from whom they have descended to the present occupants. They "pay the taxes!" We might as well say the British Government itself pays the taxes which it extracts from the people. They "feed the people?" Of the people, by whose toil and sweat those domains are rendered productive, support the aristocracy; and without the labor of the people, they would starve in the midst of their own plantations.

It is a narrow policy, which must fade away before the light of civilization and Christianity, for nations exclude one another's products from their people, cause they can be furnished cheaper from other sources. Let the immense wheat country of the northwest row its supplies into England, and she in return will manufacture articles through our country; it would be the worse off among the whole, because necessities of life were cheaper there, and the comforts cheaper here! But I must not enlarge, but specially beg S. W. to read through and attentively Smith's wheat memorial, published in the Farmer two or three months ago; only observing in conclusion, that his objection to the repeal of the British corn laws, on the ground of the little foreign wheat he carried there is very much such a one as this:—Why make a canal across the Isthmus of Suez? A ship has ever, since the beginning of the world, run across there—why then make a canal where there never will be any navigation?"

A READER.

A Public Benefactor.

Among the enlightened friends of Agricultural improvement, the name of COLMAN of Massachusetts emblazoned with the living lustre of a Public Benefactor. His services to Massachusetts—a State which owed herself by making him her Agricultural commissioner—are invaluable; not merely for promoting agriculture, but for rendering farmers content with, and proud of, THEIR EMPLOYMENT. He could be spared from Massachusetts, we doubt not that thousands would rejoice to see him appointed Commissioner for making an agricultural survey of the State of New York—at enterprise which should

follow the Geological Survey that has proved so advantageous to the interests and credit of the state.

The Product of Labor is the only Real Wealth.

Agriculture is the foundation of wealth. The sea renders her tribute; but the earth presents to skill and industry richer and infinitely varied contributions. Money is not wealth. It is only the representative of wealth. Money is coveted because it can command labor; but of what use would it be, if labor would not be commended. What would it avail to possess all the riches of Babel, if thereby we could not acquire the products of agriculture? What are manufacturers concerned in but these products? What freight the barks of commerce in their rapid flight, threatening every channel and whitening every port, but the products of agriculture? Whence does the government derive its revenues but from the fruits of agriculture? What constitutes the wealth of the country but her cotton, hemp, sugar, rice, tobacco, wool, wheat, beef and pork? Agriculture only can be considered as the creator of wealth. The merchant, the manufacturer, the sailor, the various artisans and tradesmen perform their part in making the products of agriculture more valuable; in transporting them so that the advantages of climate are equalized, and in putting them in a condition for use; but agriculture alone produces. Like the leader of Israel, she strikes the rock, the waters flow, and a famished people are satisfied. She supplies, she feeds, she quickens all. Agriculture is the commanding interest of the country, which with no singular interest of a secular nature combined, can be brought into competition.

HENRY COLMAN.

Michigan.

This noble State, though sadly cursed with wild-cat banking, is steadily improving in her Agricultural character. Reasons in various quarters may be interested by the following letter—which embodies many interesting matters respecting the Agricultural wealth of the Peninsula State.

MARSHALL, JULY 8, 1841.

"J. D. BEMIS, ESQ.—DEAR SIR—I see much in the papers relating to the wheat, and other crops, in Western New York; from all which, there can be no doubt, they have suffered greatly from drought. The wheat, in this region, undoubtedly, was seriously injured, in the early part of the season, from the same cause, and somewhat, also, by the fly; but I am happy to say that timely showers in the early days of June, operated so effectually, that although there will not be a great crop, there will be a fair supply of wheat. The miserable low price of flour, for the two last years, added to the great expense for transportation, and discouraged the farmers from extending their fields, and induced them to sow all which were broken up; so that the acres in cultivation are scarce equal to some former years. Yet, after all deductions are made, there will be a much larger crop than has heretofore been harvested. I have no doubt that Michigan will have from 2,000,000 to 2,500,000 bushels, at least, of surplus for market. With a steady demand, at 75 cents per bushel, the present population would at once furnish 5,000,000 bushels for export, with ease, for it is cultivated with far less labor than in New York.

The other crops about here, without exception, present the most animating and delightful aspect. The Indian corn surpassed anything I have ever seen, in vigor, richness, and luxuriance. But it will all be needed, for the "swinish multitude" has waxed amazingly prolific. There are, I think, over 600,000 of these animals now in the State; and if so, the surplus of pork the coming fall and winter, will come up to near or quite 300,000 barrels.

The people of this State—(although lying under a curse, resulting, in a great measure, from early legislative mismanagement, in unwisely, if not dishonestly, incurring and squandering a \$5,000,000 loan in first breeding a litter of wild-cat banks, and then commencing a senseless hostility to all banks)—are enterprising, industrious and economical, in an eminent degree; and with their rigid habits of privation and self-denial, the surplus products of the present year, at fair prices, will pay up all individual foreign debt, and leave a very handsome balance of capital, for useful and profitable investment at home.

But the most profitable staple article for exportation by the Wolverine, will, hereafter, be wool. Without deducting at all from the present produce of the State, 5,000,000 sheep may easily be kept. It is only necessary for a farmer to purchase 600 or 600 acres of

disclosed openings, which he may get for \$5 per acre, enclose the whole, cultivate 1000 acres, or enough to sustain his stock through our generally short and mild winters, and he is prepared, off hand, to keep 2,000 head of sheep. There is no doubt that all cattle, and sheep especially, thrive better upon the native grasses and elvers, found in the openings of this State, than they do upon the best cultivated grasses of New York. I have no doubt it is the best State for sheep-husbandry in the Union; and the great ease and cheapness with which wool can be marketed, at Boston or New York, renders it admirably fitted for the staple of our interior country. Our farmers are becoming convinced of this, for every one is trying to commence or increase his flock. The numbers now coming in from Ohio and other States, are immense, and I have no doubt the sheep now in the State doubles the last year's return. Money to buy them, alone is wanting, and that number would be ten-fold in twelve months to come.

I know that a serious prejudice prevails abroad, against this State, on account of the onerous taxes imposed upon real estate. Four fifths of these taxes, however, have been imposed by railroad and highway districts. In many cases they have been justly condemned as unequal and oppressive. Doubtless a more correct public sentiment is prevailing the State; for the most intelligent men have become convinced that the prosperity of a new country is never promoted by the imposition of unnecessary taxes, so exorbitant as to drive its own citizens away, and attract all immigration from abroad. Such appears to have been the consequence of the high taxation in this State. But, as I said, a more correct feeling exists. Indeed the taxes are now much lower than in former years.

I ought to add, that for near nine months in which I have resided here, I never knew a healthier land—the green hills of New England, this far, do not surpass it.

With great respect, yours,

HENRY W. TAYLOR."

Evaporation.

A correspondent inquires "if water or maple sap, when heated to a given degree, evaporates according to bulk, or surface."

Water (of which maple sap almost wholly consists) when heated to 212° Fahr. evaporates rapidly, and this heat cannot be exceeded (unless it is confined) so long as it remains in the vessel in a liquid state. The evaporation only becomes more rapid, as the fire is increased. And the rapidity of evaporation depends wholly on the quantity of heat which passed from the fire to the boiling water. Of course the larger the surface, the greater will be the quantity of heat passing, the intensity of the fire being the same. If a kettle has one square foot of surface exposed to the fire, the evaporation will be the same whether one foot or ten in surface, of the water, be exposed to the air above. And the evaporation will be the same, whether the vessel be high, and contain a barrel in measure, or flat and contain only a gallon. Consequently it depends on the extent of surface exposed to the fire, the intensity of the heat of that fire being the same.

Domestic Economy.

MORE LIGHT!—Lamps may be easily arranged for burning Lard, instead of oil. Many of them are now in use in Rochester. Ordinary lamps may be fixed for this purpose—with a thick wire so arranged as to be kept hot by the flame, and thus secure the lard in a fluid state. There is but little smoke and the light is pleasant. It is certainly far preferable to making candles of tallow; and will be a great convenience to thrifty housewives, on the score of neatness as well as economy. This mode of burning lard was devised by Mr. B. W. Oakley, of Tecumseh, Michigan. Oil is extracted from corn, by distillation, to some extent, at the west. The Niles (Michigan) Republican says:

"We have been burning in a common lamp, for the last few weeks, oil extracted from corn, a quantity of which we received from Mr. R. A. Ward, of Berrien, who manufactures the article. It gives a clear, beautiful light, and burns longer than the common kerosene oil, and emits no offensive smell. On the whole we should think it better and cheaper than any other kind of oil for lamps."

For the New Genesee Farmer.

Crops of 1811 in East Bloomfield.

Messrs. Editors—It is getting so fashionable to write of the crops and harvest, that we can scarcely make up a paper, either political, religious or agricultural, but we find a column headed the "Crops;" and such are the contradictory and extravagant statements given, that it is coming to be almost as necessary to inquire whether the writer be not a consumer, interested in representing the crops as superabundant in order to lower the price, or a producer wishing a round price for his surplus commodities—as in reading a political article to enquire to which party the writer belongs. As the public feeling has become somewhat calmed, now that the harvest is past, and the true state of the case is becoming more and more apparent, I may be less liable to the imputation of an interested writer, if I continue the record of the crops in this town. In the Old Genesee Farmer, the record is continued from 1834 up to last year. Last year our crops were so uniformly good, and so much was said of the crops everywhere, that it seemed irksome to repeat the story.

Wheat, our staple crop, is decidedly a failure. Whatever may be said of other sections of the country, wheat has not been so universally poor for many years. The cause I believe to be the same throughout the country. Our farmers were very forward with their sowing last fall—much of it being done in August, under the impression that early sowed wheat is much the surest. The fall growth was good, although a few pieces of very early sowed showed the ravages of insects. The winter was as favorable as usual. The latter part of April and the month of May were trying months. Freezing nights and thawing days with dry and cold winds, continued for so long a time as we had them, last spring, would seem sufficient to destroy every vestige of winter grain, and almost preclude the possibility of sowing any spring crops.

As we are liable to such seasons, and have our wheat more or less injured every spring, it becomes a matter of interesting inquiry in what manner we can best guard against them. Protection, whether by hills, forests, orchards, or even fences, is the most efficient guarantee against cold chilly winds, which try up the life of the wheat and prevent that thrown out by frosts from taking root again. Early sowing on land under thorough cultivation, thereby giving the roots firm hold of the soil, is next in order to protection, and more under the control of the farmer.—Draining all surface water is of the utmost importance. A regular rotation of crops, inasmuch as the land is thereby supplied with the requisite manurment for the crop, is of more consequence than usually imagined. The skimming system of cropping with wheat every other year, so very generally pursued among us, is the least calculated to endure such seasons, and has in the present crop received a most fearful rebuke.

Of the kinds of wheat, little discrimination can be made in such unpropitious seasons. The quality is good, and the yield will be greater in proportion to the straw. There has been much complaint of insects in many fields that were injured by the spring—but I have seen no appearance of the wheat worm which could be found so plentiful three or four years since. Smut and rust we have generally escaped this season—but stem can't has made most rapid advances upon us. His darkened path may be traced through the length and breadth of the town, and some fields he has this year appropriated exclusively to himself.

Beside this prince of thieves, we have a new enemy to contend with, which, from its rapid strides, we have reason to fear will outstrip all others in des-

trouying our wheat crops. I mean conch or quack grass. If this is the worst weed the English farmer has to contend with, it must be still worse for us, as we have no cheap laborers to spare for hand-weeding. Spring wheat promises to be a fair crop. The season was so backward that but little was sown.

Barley was also unfortunate in its seedling time.—What little I have seen promises an ordinary yield.

Oats.—It used to be an old proverb, now fax in the fire and oats in the mire. If therefore the proverb is good for any thing, we ought to have good oats as the ground was moist enough surely. It is generally supposed that seasons like the present are not good for oats, yet the crop is with us more than ordinarily we get. During the month of June, they looked as if going to head out before half grown. The straw is indeed short, but the heads are of good length and well filled. What is remarkable they all stood up well, there scarcely having been a severe rain storm since they were sown.

Corn.—On some accounts this has been a good season for corn, and some fields of early planted will come off very fine. In general the drought has injured the growth and will prevent its being well filled.—The prospect is that it will be early ripe. The stalks being now much skivelled and dried up. The amount raised will I think be less than usual.

Grass.—This is our poorest crop. Less has been cut and less pasture for our stock than we have had for many years. The prospect is now that fall feeds will be scarce and we shall have to feed our cattle from our barns unless we have rains soon.

Potatoes and all root crops have suffered severely by the drought, and if we get any it will be from early planting. Potatoes I think will lose in reputation, and if the order is not reversed, one peck from twenty bushels planting, instead of twenty and thirty bushels from a peck of seed, it will be because they are better than they look to be.

Ruckus.—I have seen none growing.

Peas are generally said to be good, although I think they will not be found to yield well.

Wool.—The quantity of wool grown in town is constantly increasing, and a second to no crop except wheat. It has this year been ready sales at fair prices.

Fruits of all kinds are in more than usual abundance; and although we are short in a few important crops we have abundant reasons for gratitude for the prosperity which hath attended the toil of the husbandman.

Yours, &c.

ADAMS.

E. Bloomfield, Ont. Co., Aug. 25, 1811.

Twelve Varieties of Wheat.

Gen. R. Harmon, Jr. of Wheatland, has for several years past cultivated many different varieties of wheat, with a view to test their relative value, or adaptiveness to our soil and climate. At our request he has left at the Rochester Seed Store, samples, in straw and grain of twelve distinct kinds raised by him the past season. The seed of several of these varieties was imported from England last year by Mr. Eaton; but the past winter and spring being unusually severe for wheat, several of these kinds were a good deal injured by frost. This, however, should not be considered decisive proof that they will not endure our ordinary winters; for many cases might be found where common varieties were almost entirely destroyed the past season. The experiments of Gen. H. are valuable however, and he will please accept our thanks for the samples and the following paper which accompanied them.

For the New Genesee Farmer.

MR. M. B. BATEMAN.—The following is a list of the names and a short description of the twelve vari-

ties of wheat, samples of which I have left at the Seed Store:

No. 1, **TUSCAN**. This variety was introduced into this town four or five years ago, by Abram Hamford. The seed I believe was imported. It has large straw chaff white, bald; grain large and white, ripens a little later than the common Flint. I have tried it on different soils, but it appears too liable to injure by frost for profitable cultivation in this climate; still it may possibly become acclimated so as to be a valuable variety.

No. 2, **TUSCAN BEARDED**. This variety was found mixed with No. 1, but is very different from it in appearance. The straw is very large, with long heads chaff white, with a long stiff beard; grain large and handsome. It appears to be less hardy than the preceding; more than two-thirds of it being destroyed by frost with me the past two seasons.

No. 3, **VIRGINIA WHITE MAY**. This variety was introduced from Virginia, and is said to be the kind of which the Virginia flour is made, which stands high in the markets. The straw resembles that of the White Flint, but is rather lighter. Chaff white, bald grain very short and round, of a reddish cast, some what flinty. It weighed last season sixty six pounds to the bushel; ripens about a week earlier than the White Flint; endures the winters well, but has suffered more from the drouth this year than most other varieties.

No. 4, **VIRGINIA BEARDED**. This variety I obtained from No. 3, by sowing it in the spring. Head large and heavy, chaff white, with very stiff beard which consider an objection to it.

No. 5, **WHEATLAND RED**, obtained in the same manner as No. 4. Straw large, heads rather short but heavy; chaff red, bald; grain reddish; has the appearance of yielding well, and is very hardy.

No. 6, **COMMON WHITE FLINT**. This name was probably given from its white straw and white flint grain. Heads short; chaff white, bald; grain very white and flinty with thin bran, and yields flour of superior quality. It is more generally cultivated than any other kind in this county, but the seed can seldom be obtained pure. It is a very hardy variety being more seldom injured by frost than any other kind I am acquainted with.

No. 7, **IMPROVED WHITE FLINT**, Selected from among No. 6, and resembles that kind, but the heads are larger and the grain not so flinty; makes very superior flour and a greater quantity per bushel than any other kind within my knowledge. (Gen. H. has left seed of this variety at the Seed Store for sale.—Eds.)

No. 8, **WHITE PROVERB**. This was imported from France. I obtained it at the Rochester Seed Store and have raised it two years. The straw is smaller than any of the varieties I have cultivated, grows thick and is apt to lodge. Heads large; chaff brown bald or with short beards near the upper end; grain white, very large and fine, and has the appearance of yielding flour well.

No. 9, **PROGRESS**. This is an English variety imported last year for the Rochester Seed Store. Straw short and bright; heads very close set and heavy; chaff white, bald; grain white and fine. This variety is considerably injured by frost, and I doubt whether it will prove sufficiently hardy to be valuable here.

No. 10, **ECLAUSE**. From the same source as No. 9. Its growth and appearance this variety resembles our Red Chaff Bald, but the grain is a darker red. It does not stand the winters as well as some other varieties.

No. 11, **GOLDEN DROOP**. Imported the same as the last two. Resembles the White Flint in growth and appearance: head larger; grain reddish, large, with

Wheatland, August 20th, 1841.

REMARKS.—Any thing which tends to increase or improve our wheat crop, is of the first importance to this country. And as there can be but little doubt that improvements can be made in the kinds of wheat, we hope some of our readers will unite with Gen. Harmon, to test the matter by experiments. The proprietors of the Seed Store have been at considerable expense this season to import some 15 or 20 of the finest varieties of wheat: to be found in England; which will be sold at \$1 per peck—this barely pays the cost and expenses. How many farmers will try them all!—Eps.

Cherries.

A Supplement to our Last Article on this Subject.

The Early Richmond ripens at the same time with the White Tartarian and the Black Coronet; and may be used for culinary purposes a fortnight sooner than the Kentish, or common red cherry. We value it, however, chiefly as a dessert fruit. When it becomes very ripe, it loses with its brightness most of its acidity; and in this state, it is chosen by many in preference to the sweet cherries. The delicacy of its juice far surpasses that of the common red cherry.

How long it would retain its excellence on the tree, has not been ascertained to our knowledge. We have kept it there more than six weeks after it was ripe. It is not inclined to rot; but its sweetness at length attracts many insects, including the yellow hornet. The humming bird also comes in for a share; and we have seen it insert its little bill both when it was on the wing, and when it was sitting on the branch.

The Early Richmond is but a shrub, and may be trained very low; and if its fruit was protected by straw, like the currant, it would probably keep as long. In our estimation it is far more desirable.

W. R. Prince says this variety was brought by his father from *Richmond* in Virginia. It is probably a native fruit.

The drought of the present season, has been very favorable to cherries that are liable to rot in wet weather; and it has given us an opportunity to observe that when the fruit dries up on the tree, it is generally in consequence of the punctures of insects. We remember to have seen many years ago near Philadelphia, one branch of a cherry tree well loaded, a month or two after the usual time of ripening, and when no fruit remained on any other part of the tree. Its appearance was very singular. On approaching it however, we found it was guarded by wasps and no living thing could go nigh them with impunity.

The Transparent Guigne is a heart cherry; and like those of its class, not generally liable to the charge of *sourness*, though the fruit had a sharpness this season we had not noticed before. Was it occasioned by excessive sunshin? We consider the Transparent Guigne as one of our most delicious cherries.

LATEST NEWS

From the Liverpool Times.

State and Prospects of Trade—The Harvest in England.

The accounts from the manufacturing districts continue to be very unfavorable, with the exception of those from the woollen districts of Yorkshire, in which there is some slight improvement. The amount of trade in Lancashire is truly deplorable, confidence having been excessively shaken by the losses and drawbacks of the last two years, and the demand for goods being at present miserably low. Nothing but good luck can restore the cotton manufactures to prosperity, by increasing the power of the middle and lower classes to purchase. The manufacturers are changing clothing, and by restoring confidence to the public mind, will be enabled to do so. At present, but scantily, in the prospect of the country, so far as the harvest is concerned, is far from encouraging, for the weather continues very cold for the season of the year, and the great weight of rain which has fallen must have done some mischief. It is still possible that the harvest may be an average one, but there is no reason to hope that it will be more than that, and without a change of weather it will be much less. Should there be any great deficiency, the consequences will be very serious indeed, for the supply of bonded grain in the country at present does not exceed the quantity of four or five thousand quarters, and any further stoppage such as may be occasioned from the export will have to be purchased at very high rates, as the crops are by no means promising abroad, and the foreign granaries are unusually bare. For the last three weeks the price of all free and bonded grain have been rising in all the principal markets, and wheat has already reached a price much too high for the comfort of the people or the prosperity of trade. Unless there should be a decided improvement in the weather, a still further in-

whom greater rise will take place, and one which will
 doom the merchants and manufacturers to another
 year of gloom and embarrassment, and the poorer
 classes (those whose wages, as we are told by Lord
 Sandon and other great political economists, are with-
 out a price) will to boot work and sell shorter com-
 modities for twelve months. Had the Government and
 politicians may be to deceive themselves and the peo-
 ple, as to the working of the corn laws, another deficient har-
 vest, if, unfortunately it should take place, will open the
 eyes even of the most obstinate. There has been
 very little change in money matters during the last
 week. My money continues to be abundant, but there is
 a great want of confidence in investing it. We are
 glad to see that the bullion of the Bank of England is
 still increasing, though slowly. It now amounts to
 £5,179,000, which is an increase of £72,000 on the
 quarter. The weather of the next three weeks
 will decide whether it shall continue to increase
 steadily, or again decline much more rapidly than
 it has advanced. Both the Bank of England and
 the Treasury are in a state of great anxiety, and
 the last quarter, though they are still in the same
 position with what they usually are. The rise in the
 price of grain has already begun to affect the averages,
 and it is believed that some decrease of the duty will
 take place either this week or next. The average
 prices of wheat have advanced as follows during the
 last six weeks:—The week ending the 18th of June,
 the average was 62s. 5d.; on the 25th June 63s. 5d.;
 the 2d July 63s. 11d.; the 9th, 64s. 3d.; the 16th
 64s. 11d.; the 23d, 64s. 11d. These returns do not
 include the sales of last week, which were at con-
 siderably higher rates. The duty at present is 3s. 8d.,
 and the average price of the six weeks, 63s. 6d. An
 increase of a shilling per quarter in price diminishes
 the duty one shilling per quarter, until the price
 reaches sixty-six shillings, when the duty declines
 two shillings, or every shilling in the price of the
 price. At the same point the duty on Canadian
 wheat falls from 5s. to 6d. per quarter, and the duty
 on the barrel of flour to 23d. As the arrivals of Cana-
 dian wheat and flour are becoming very great, an
 unusually large quantity would be let into the mar-
 ket if the average of 67s. should be reached.

From the Mark-Lane Express of Aug. 2.

"In the early part of the week we had two or three days of fine weather, and hopes were beginning to be entertained that the rain had at length left us; on Thursday, however, it again became overcast, and since then heavy showers have fallen in various parts of the country. The temperature has, throughout the week, been exceedingly low for the time of year, and the absence of hot sunshine is greatly retarding the maturing of the crops, so that it has now become certain that the harvest must inevitably be late, and

consequently more than usually precarious. With regard to the probable yield of Wheat, the reports are increasingly unfavorable; and unless a decided and total change of weather takes place, it is much to be feared that the produce will prove materially deficient both in quantity and quality, and even under the most auspicious circumstances we much doubt whether an average can be formed.

The high value which Wheat has now attained has induced the Farmers to thresh out rather freely, and the deliveries have been somewhat more liberal at a few of the leading markets in the agricultural districts; and the very high prices asked by sellers having tended to check the demand, there has, on the whole been rather less life in the trade, notwithstanding which prices have continued to creep up.

Our Scotch letters inform us, that though the weather had rather improved in that country it still continued cold and gloomy, and the want of that genial heat so much required at this season to ripen the crops, had caused all species of grain to remain in an unwholesome state; of positive damage, however, we are happy to say there are fewer complaints than might have been expected.

"From Ireland we learn that a good deal of uneasiness was felt there respecting the effect of the recent heavy rains on the outstanding crops. Holders of grain had taken the alarm, and enhanced rates were asked for both wheat and oats at most of the leading markets.

"The last London average is 2s. 3d. per qr. higher than for the week previous, being 3,550 qrs. at 7s. 3d. per qr. This is of course not included in Thursday's general weekly return; and as a considerable advance has, since that was made up, taken place at many of the leading provincial towns, the next average for the Kingdom will probably be about 2s. per qr. higher than the last, and the duty will shortly recede materially."

A Letter of Inquiry on Female Self Education.

218. Editor:—The kind regard which you have manifested for the interests of the female readers of your paper, induces me to hope that you will pardon the liberty I take in asking for the use of a small space in its columns. Conscious of my youth and ignorance, I do not seek to give, but to obtain instruction; and if some one who possesses the information desired, will give it through the medium of the Farmer, I think it will prove of great benefit to others besides myself. My father is a Farmer in moderate circumstances, and like many others in our land is unable to afford his child on any better means of education than can be found at a common district school. That I have attended as long as appears beneficial, and now, wishing to make higher attainments, I am dissuaded to commence a course of private study or self-instruction. I do not in this way expect to obtain a perfect, much less a *fashionable* education; but I hope to become familiar with the most important and useful branches of knowledge, so as to be able to instruct the younger members of the family, and render my life a greater blessing to myself and to those around me. My situation at present allows me from four to five hours leisure each day, and I have the means of obtaining limited supply of books; but I find myself at a loss to decide how to proceed. I write therefore to entreat some person who is qualified for the task, to advise me on this subject. I wish particularly to be informed as to the relative value or importance of the different branches of study; the best order to observe in relation to the time of commencing and the manner of prosecuting them; the most suitable books, &c. &c. reference being had to my situation and circumstances.

A full and explicit answer to this, will very much oblige
Your sincere friend, HELLEN.

Our Valley, July 1-11.

REMARKS.—It gives us sincere pleasure to publish the foregoing letter of our fair friend; and we hope some truly of experience and education will assist her in her praiseworthy efforts. We see no reason why farmers' daughters, even in no fortunate circumstances, may not elevate themselves to an intellectual standard far above many of those who boast superior advantages. We trust Helen will pardon us for making some alterations in her communication.—Eps.

Inquiries about Ashes.

MUSSEY, EDITORS.—I wish to ask the following questions respecting the use of wood ashes as manure:

- 1st. What quantity of ashes is it proper to apply to an acre of grass land?
- 2d. What kind of soil is ashes of the most benefit upon?
- 3d. What time in the year is the best time to apply ashes?
- 4th. Will ashes be as beneficial upon land that has been ploughed, as otherwise?
- AGRICULTURE.

Rhyme and Reason—Political Economy set to Music.

However dry some may consider Political Economy, a rhymester eastward shows that rhyme may be readily manufactured from some branches of that useful science. Only think of the *statistics of cotton* interwoven with the flowers of rhyme! If people will not study Political Economy more thoroughly in its simple form, some rhymester might render himself a public benefactor by rendering the great truths of that science familiar to our ears through the aid of rhyme.

From the Northern Light.

COTTON STATISTICS.

BY HENRY WHITING.

Egyptian, Greek, nor Roman ever knew
That such a plant as cotton grew;
Or, if 'twere known,
'Twas only as a common, useless weed,
Which idly sprang up, flourish'd, went to seed,
By no one sown.
The eastern Indies grew it, spun, and wove;
But, wanting "gin," and steam their motive,
The trade was small,
Their bales, torn up as rags among mankind,
Would scarcely serve its bleeding wounds to bind,
Mustins and all.

A century since 'twas thus. The distaff, and
The shuttle, simply thrown from hand to hand,
Exhausted art.
Spindle and power-loom their race began
When England brought to light those "Wrights of man,"
Her Ark, and Cart.

What now? Why take the thread by England spun
In one short year, and to and from the sun,
In course sublime,

Trail it through spheres of planet bright and star,
'Twould stretch, still stretch through all those journeys far
The fiftieth time!

Or, take the web her looms, of giant strength,
In the same time and out—what is its length?

As circle bound,
'Twould span the earth's enormous waist,
Where longitudes its longest line has trac'd,
Twentieth round.

And are these webs, which thus could swathe the globe,
Sent out that man alone may be cloth'd?

'Tis even so.
It is the age of cotton. Fold on fold
Of its smooth texture clothes the young and old,
The high and low.

And whence the raw material which supplies
These countless spindles?—Which forever piles,
Three giant looms?

From the warm South. 'Tis there the genial earth
With cotton teems—'tis there it springs to birth—
'Tis there it blooms.

But 'tis not England only that uplifts
The age with steam. That power with Empire shifts.

New-England long
Has felt the mighty impulse. Soon will she
Venue for the world—old England's rival be,
As rich, as strong.

Then let the North and South in union live,
Nature and art to this their sanction give,
Join'd hand in hand,

Producers and consumers, mingled, claim
A common heritage, a common fate,
A common land.

Palmton, East Florida, July, 1841.

Agriculture and Education.

These things should go hand in hand everywhere. The Farmer who neglects to improve the minds of his children, gives indubitably proof that he himself is unfitted to realize the blessings which Heaven has liberally showered upon the land. See to the schools in your neighborhood—visit them frequently—encourage the teachers and the scholars with your presence, even for a few minutes in a week—and the

* Sir Richard Arkwright invented the *spindle*; the Rev. Edmund Cartwright invented the *power-loom*.

* These are not poetical fictions, but mathematical calculations—a part of statistical records, which have been published.

results will soon be manifested by signs that will cheer you onward to greater exertions in the cause of Education. You owe at least this much to your own children—and in discharging the duty to them, you will have the consciousness of incidentally benefitting your whole neighborhood.

IF Wives, mothers, sisters! Your influence may be made all-powerful in promoting the welfare of society in this way. How can you allow your children or other young relatives to pass through the schools, uncheered by the encouraging visits and influence which you might reasonably be expected to bestow on the schools that exert such powerful influence "for weal or for woe" over the immortal minds of the rising generation.

Let any one person, lady or gentleman, try the experiment—visit the school or schools in the nee neighborhood—manifest becoming interest in the progress of education—and their exertions, like heaven-born Charity, will be "twice-bless'd"—blessed to the recipient as well as the benefactor—repaying all toil with hundred-fold gratification to those who benevolently engage in the blessed work.

For the New Genesee Farmer.

Scraps.

MESSRS. EDITORS—Having been a reader of the old and New Genesee Farmer, I have taken note of a number of facts that have fallen under my observation as a practical farmer, and am willing to contribute my mite in compliance with your oft repeated request.

SALIVA IN THE HORSE—Can be cured by mixing a table spoonful of flour sulphur in the salt that is given them.

MILK SPREADING—May be remedied by pressing the teat full of milk against a stone and rubbing it anuridy.

GRAFTING—Can be done by any person by cutting the shoots before warm weather, and keeping them in an ice house till the flowers fall, or in other words till the bark peels; then cut off the limb, take a twig three or four inches long and sharpen it by cutting entirely on one side, from one to two inches in length, according to the size of the twig, raise the bark on the stock with your knife and insert the graft—the bark side next the bark. Apply ascleps enough to exclude the air, and the process is completed.

Setting grafts on this plan supercedes the necessity of opiating the stock, they are much surer to grow, and the labor is much less than the old way. The end of the stock should be painted with common paint; it is better than wax.

YELLOW WATER—The yellow water can be cured by the following process:—First bleed the horse; secondly, give him one teaspoonful saltpetre by dissolving it in a pint of water; the horse must be considerably dry before he will drink it; thirdly, give him one table spoonful of rosia pounded fine and mixed with bran or meal; let one day intervene between each. A second portion of resin can be given if necessary.

DISORDER IN HOGS—The writer has had a number of hogs that have become lame generally in the hot months of July or August. They were attacked in the hind legs and became lammer and lammer, till it was with much difficulty they could move at all—lose flesh rapidly, and if they got better in the fall, fat but poorly; the cause and cure is respectfully called for.

POLITICS—S. W. is treating political economy after the manner of a master. But is it not dangerous ground for you to tread upon? I doubt your getting a great way without treading on some one's toes.

CANADA THISTLES—This scourge of all scourges is making rapid progress in our country. Twenty years ago it scarcely ever seeded, but it appears to

have become acclimated and now seeds very heavily. They can be killed by turning the land to pasture, and pulling them as often as they make their appearance.

DRAGLOG—This instrument can be made the easiest by splitting a log eight feet long and eighteen or twenty inches through, and cutting again across the middle of one half, say four inches wide and three deep; in this pin the but end of a pole. It may be made lighter by hollowing out the ends. It is very useful in smoothing newly ploughed sward.

West Niles, April, 1841.

W. R.

Life in the Country Contrasted with City Life.

The discontented farmer, who sighs for city life, may be edified by the picture of crowded towns presented in the annexed sketch, from the pen of JOHN A. DIX, late Secretary of the State of New York. The fidelity of the picture is woefully realized by those of us who are surfeited and smothered by the heat and dust and other accompaniments of city life under a roasting temperature of ninety-six to a hundred. There is "more truth than poetry" in the sketch, as the doubting farmer may discover to his cost, if he forsakes the free air of the farm for the glitter of even the best regulated city. The "Northern Light," the valuable paper now edited by General Dix, has never been embellished with a more vivid picture than this from the pen of its gifted editor.

Town and Country.

BY JOHN A. DIX.

At the very moment when cities put on their worst aspect, and the country its fairest and most attractive, it may not seem altogether consistent with impartial justice to set up a comparison between them. And yet it will not be difficult, we apprehend, to hold the balance even. That cities possess some superiorities over the country, particularly at less genial seasons of the year, will not be disputed. When our friends in the interior are blocked up by mountains of snow, and the intercommunications of pleasure and business among them are difficult, it is not unappreciable, each man among us shivers at his twenty-five foot front of sidewalk, under an enveloping sense of the fine for neglect thereof, and we pass from one extremity of the city to the other, with as little obstruction as in the heat of summer. But cities have some superiorities over the country at all seasons. They contain, in a more concentrated shape, the means of intellectual improvement. Extensive libraries, reading-rooms and bookstores are there to be found, furnishing information on almost all subjects, and in almost all languages. The perpetual contact and collision into which mind is brought in constant preparation for conflict, and keeps it in constant preparation for conflict. Men are, as it were, always within pistol-shot of each other, walking the streets and lying down at night with their intellectual weapons sharpened and their harness buckled to their backs. Yet we must concede that the country has some advantage over us in certain departments of mental labor. Its shades, its tranquility, and its repose are peculiarly adapted to meditation. He, who would penetrate the depths of a subject, will more readily attain his object in its cool and quiet retreat, than in the heart of a city, with all its bustle and its tumult to distract his thoughts and disturb his processes of investigation.

But assuming for the city some superiority in the particulars adverted to, how do we sink in a comparison when we turn to the other views of the subject? Let us look about us, and see what is our condition now. It is midsummer; we are in the very middle of the sign Leo; and the "degenerate rages." Let us look at the thermometer—92 degrees in the shade! What a suffocating heat, and no escape from it! The rich men did not long for a drop of water from the finger of Lazarus more eagerly than we for a mouthful of fresh air from the towering Catskill or the martial Helderberg, which we see in the distance. We close our windows and blinds and shut out the bright day, under the suggestion of a philosophical friend that light and heat are in some degree inseparable, and if we exclude the one we get rid of a portion of the other. We sit down in this artificial twilight of our dwellings, and find life insupportable. But business calls us out. We must be at our counting-rooms, our office, and our workshops: we have

use to try at the Circuit; some good friend in the morrow has sent us money to pay taxes, or a power attorney to procure a pension for one of the gallant spirits who shed his blood in asserting our independence, and we must see the Controller of the Pension Agent: we have promised to meet our friend Jenkins in a room, and assist him in that ugly business with which he is entangled. We are in the street. There is not a cloud in the sky, and the sun shines out with celestial splendor. He has just reached a point in the heavens, from which he looks straight down the street we are to walk through, leaving not a foot of shade on either side for shelter. There is no choice but to face him in all his fierceness. The pavement on either side-walks is heated to the temperature of a furnace. Our shoes are doubtless the lightest; but our feet burn as we tread these pavements of brick, which are fresh from the baking. We pass along the street. The sun has been shining for hours on the roofs of these houses, which are exhaling, for our comfort, the heat they have absorbed. Here comes a poor heavily laden, dragged painfully over the pavement. The horse is struggling with his load, panting at least thrice for every step he takes; and the man is looking for a dry spot in his red bandanna handkerchief, to wipe off the sweat that is pouring down his mottled visage. An unhappy cur, with his ears muzzled and his tail low, has just passed along, and our Council Ignorant of the natural history of the animal, or did they invent the torment for the express purpose of making him mad by slugging his tongue in his mouth, and thus closing the principal outlet for his surplus heat? A half a dozen others have gathered round this wailing, for want of better shade. They have just finished their half of a labor, and are breathing a moment before they encounter the fiery ordeal, through which they are to pass to their dinner. What would they not give, of little they have to give, if they could exchange places with one of the thousand groups of their fellow-laborers in the fields, who at this very moment, are sharing their lunch under a tree of impenetrable shade, and are preparing to lie down for an hour upon the bosom of their mother earth, with the purest air around, and the grass and ground and wild flowers beneath them sending up freshness and fragrance! But a contrast to all this do we present! We have entered up the fair face of our mother with bricks and grating-slabs: a few trees scattered along the streets utilize us with conceptions of shade, which we are to realize; narrow patches of grass of a few feet length, in front or rear of our dwellings, parched by the evening and the night where we—solitary mortals as they are, of the broader surfaces, which we have overtopped and buried alive under our contrivance to hide the face of nature.

But, the heat of the day is past, and the night is lying alike over the face of the country and the town. We begin at length to think we breathe more freely. The streets are no longer blazing with the rays of the sun; but what they have been gathering at all the day long, and they are now giving it out, we pass through them, in streams as scorching as the breath of a volcano. Those, who keep or can afford hire vehicles, have driven out of town, and are snatching the free air, or snatching hasty glimpses of the fields and trees before they are lost in the darkness, these are the favored few. The lot of most of us is passed the evening and the night where we have passed the day—in the heart of the city. And, spite of its heated atmosphere, there is something animating in its aspect at the early hours of night—in its long lines of thickening lamps, in the numberless lights at stream from the windows of its dwellings, and in the hundreds and thousands that are seen in the streets, tingling at their porches or making the flinty pavements vocal with their tread.

But the hour of rest has come, bringing new discomforts with it. As the air begins to grow cool and for the renovation of our drooping bodies and spirits, we must shut it out. This is the overruling necessity of every night. The city burgoes of the middle ages was more vigilant to close up the inlets to its fortified dwelling than we to shut out our mortal enemies—the agents of the foul enemy, and we against the housebreaker and the thief. But ere are great occasions which call for fresh precautions. The evening paper tells us that a gang of desperate villains are abroad, and that our property and we are in danger. What a peering into the condition of locks and fastenings do these warnings procure! We examine every window, we lock and bar and double-lock the street door, and shut up every opening through which the breath of night can gain admittance. The dog has his proper station assigned

him. We bring forth our pocket pistols, see that they are loaded, put fresh caps on them, and place them within reach of our beds. Thus prepared for the most desperate extremities, we commit ourselves to the care of a superintending Providence, brooding over apprehended invasions of our domestic altars by our fellow-men, and with a host of bloody resolutions at our hearts.

These, however, are ills in our lives. We are not always thus belligerent. But in our best estate there is no lack of discomfort. We must lie down at night in steaming bed-chambers until the summer heats are over, and rise in the morning, unrefreshed, for the repetition of the same scenes, through which we pass of year-day. Nor are we comforted by the frequent snuggles, which spring up within us, as to the condition of him, who, in the calm and quiet retreats of the country, lays his head upon his pillow, with the cool breath of Heaven pouring in at every door and every window, thrown wide open to receive it, and sinks to rest with the assurance that, amid such evidences of the power and beneficence of the Almighty as those which surround him, no inopinion hand will be raised to take from him his property or shed his blood.

Agriculture in Missouri.

We have often remarked that western agriculture must be peculiar in some of its essential features, and are more and more impressed with the importance of discussing such peculiarities in a manner that will awaken attention and conduct to profitable information. We may say with much propriety that the agricultural science, regarded in its proper construction, as applicable to the west, has yet to be learned.

We cannot find a portion of land in the whole earth like ours; and while we admit that there are certain principles ascertained to be proper in the management of all soils, still there are others only suitable to such as in their nature require their adoption. We require a somewhat peculiar mode of ploughing, a peculiar character of grains and seeds, and peculiar treatment. This must be admitted, for look at the distant regions in other parts of the world, and you find local principles and local treatment in tillage soils that are only proper for their own locality. The vast quantities of land amongst us to be had at a small valuation, and their exceeding richness, renders it necessary that our agricultural operations and policy should be peculiar.

With what an ill grace do recommendations reach us through the medium of foreign agricultural works, such as the benefit of a nice system of drill husbandry—a system that would require as many hands to an acre as we appropriate to a dozen, the one or two yieldings, perhaps double the one of ours, which is its only excuse. But drill husbandry is necessary where it is practiced, because land is scarce and high, making it important that every inch should be made available in the highest degree. When we take into account the value of labor, the largeness of our plantations, and the productiveness of our soil, such nice measures must be discarded as impracticable.

Then for us to adopt as a general principle, the lavish application of manure, is a doubtful means, and unless an intelligent discrimination is practiced, attended with danger. We do not say that we look upon the attempt to increase the richness of our soil as useless, or that it ought to be regarded with indifference; but we find recommendation, at present, other means than the application of manure.

Such of our soils as are inferior in production may be vastly benefitted by deep ploughing, a mode that is easy in its practice, and making little additional draft upon our time or force. This, together with a thorough pulverization of sward, will be found sufficient for our lands for many years—at least it will be found better to depend upon this, until other equally valid considerations are acted upon which now plead more strongly for immediate attention. We will not speak negatively longer in reference to our local needs, but say a few words conveying our opinion of what we seem to require in order to advance rapidly our interests by a suitable development and application of our resources.

To this end we must first to learn the nature and extent of these resources. No individual or community can employ means with a good prospect of continued success unless a knowledge is first attained of the character of means in possession; when this is decided, it is very properly to apply. Are the resources of a State or larger community geographically confined to particular policy, diversified in their nature, then will it be more difficult to fix upon a judicious line of means, but situated as we are in this

respect, the policy best to be adopted is apparently obvious, for we are, in an unrestricted sense, an agricultural community. In keeping our eye upon development and application, we would say that although we might arrive at a community to considerable extent as a grain raising portion of our country, yet our markets are, and in all probability will be such as to make it suicidal to our interest to make this product a staple.

We say, that having properly ascertained all our relations as an agricultural community, we must, if we would thrive, make our staple production—*Stock, Tobacco and Hemp*. There must be made the articles of export. Upon these we must depend for our circulating medium. All of these articles are steadily rising in value, and the demand for them is growing greater. There is no danger of overstocking the country, for we are importing and shall be for many years, two of them, viz: Stock and Hemp, and there is a substantial market of Tobacco in Europe, and this is growing better.—*Mo. Farmer.*

Subsoil Cultivation.

Sir—I am an old man, and an old farmer; but my eyes are not so dim, but I can see that there is much to learn in the way of a profession that has hitherto been considered either too high or too low—which I cannot say—to admit of much advantage from observation or reflection; indeed it is plain that we shall be distinguished in the race of improvers, that we shall be distinguished in the way of farming, as well as in every other science. But the subject that has awakened me to new life and fresh vigor, even in my old age, is, the cultivation of the subsoil, by means of moving it by such an instrument as that, or which you have given us a drawing in your last, the *Danston Plough*; and for the first time in my life, I regret that I was born so soon, by 20 years. Way, Mr. Editor, I can see with half an eye that the thing will work, and can fully understand how that the operation must be as beneficial for a sandy, as for a clay soil, much of the former, as well as of the latter, having a retentive subsoil, which operates in a two-fold way to the injury of the crop; first, in wet weather, as preventing a glut of water from passing away, until it has become putrid and poisonous to vegetation, and next, in a time of drought, preventing the descent of the roots of the plants in search of moisture, which is over present, even in the driest seasons, within a given distance of the surface of the earth, and where, as you say, they go for water, which by their tap roots is pumped up to the lateral roots, while busily engaged in search of food in the surface soil—a pretty idea that, and worth many times the subscription money of the Cabinet.

To a want of deep ploughing might be attributed, I have no doubt, the weakness of our wheat-crop, which is so liable to be prostrated by any little gust of wind, after it has shot into the ear, and often, indeed, before that period. With a strength, equal in appearance to any vicissitude of climate, we find our crops ready to fall by their own weight, and wonder that with straw sometimes like reed, they have the substance only of the common grasses. This is the cause, depend upon it, and it is but natural that it should be so, for I have long considered the tap-root of a plant—and which even wheat is furnished with—to act the part of an anchor, and the lower and deeper this is cast, the greater will be the power of resistance; while the secondary purpose which it serves, that of "pumping from below the moisture that is to serve as drink to the food which is collected by the lateral roots in the surface soil," is new to me, and finishes the picture admirably. I consider therefore, the operation of subsoil-ploughing the "ne plus ultra," as the old blacking makers say—of successful agriculture, and have great hope that by its adoption, one-half, at least, of the evils attending the cultivation of the wheat-crop will be obviated, possibly the blight and rust, and even the *Hessian fly*, and especially the *lifting of the crop by frost*.—*Flourish Cabinet.*

Improved Husbandry.

The vast improvements in Agricultural Products—in roots, grain, fruit, and live stock—show what may be done by judicious cultivation. It should be the aim of every farmer to secure the best that can be raised. The comfort of his family, and his pecuniary profits would thus be alike promoted. "A hide farm well cultivated," is more productive and profitable than great deserts of a more overgrown and profitable thicket. Thousands of farmers who now can scarce "make both ends meet" on a hundred-acre farm, might realize double the income and tenfold comfort from fifty well-cultivated acres.

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A Word to our Friends.

The New Genesee Farmer is daily finding favor, extending its influence among the tillers of the soil. Our present edition is nearly exhausted, but the work will soon close, when we intend to astonish our folks. More about this, next month. An apology to our readers for the bad appearance and of some of our late numbers; the fault was in press, or its owner. We have made a change next month, and we hope for the better. At all events we determined to have matters go right shortly. We hope our correspondents will make good use of our evenings now coming on, and let us hear from them a little more frequently. We have no regret yet for HELEN. Still we not have one next issue!—We are now off to SYRACUSE—great news for next!

Hints for the Month.

The past months have been devoted chiefly to the preservation of the present must be to the preservation of the past. It should be suffered to stand in the shock, until become fully ripened by nourishment from the sun—but not later, as husking with cold fingers is unsound. Let it be placed where it will be well exposed to the air; as the quality of corn, both for domestic consumption and for feeding animals, is greatly injured by moldiness, even of the cob only, though it appear perfectly sound. For the same reason, it should be taken that shocks of corn standing on the ground, are not injured by wet weather. After digging, should not be exposed to the

sun. They lose their fine quality, and acquire more or less of bitterness, when kept in cellars exposed to the light merely. Those for immediate domestic use, should be kept in barrels, and the rest either in large bins lined and covered with turf, or mixed with earth in barrels or hogsheds, or else buried in heaps in the open air. But ventilation is necessary. A hole should be made with a stick or crowbar in the upper part of every potato heap, and continue open until the severest weather sets in: for want of this, thousands of bushels are lost yearly; and the loss attributed to frost only.

Apples, and all root crops, need the same care, but turnips more especially, which will inevitably be ruined unless the heated air from the heap can pass off.

Mangel wurtzel and sugar beets should be completely secured by the end of the month, and rutabagas not much later, if the danger of loss by freezing is to be avoided. Get a rutabaga book, described in our eighth number of this year, by which a man may easily harvest on a acre a day.

Winter apples should be gathered before the arrival of severe frost—till near the end of the month—they should be carefully picked by hand by means of convenient ladders—and should not be suffered to become in the least degree bruised until they are well packed. As on easy, cheap, neat, and excellent mode, we recommend packing with chaff and lime in barrels, adopted by W. F. Shotwell, and described on page 150 of our last volume.

Now is the season for planting trees—remember—now is as easy as next year, or the next—and they will be growing all the while—put off other work, but not this. Shade trees give almost the whole expression to a country or a town. If the work is done in autumn, and well done, the earth will become properly settled about the roots, and they will have nothing to do in the spring, but to grow—but if removed then, greater or less check must inevitably be given to them.

To have ground early in good order for crops next spring, plough your ground this fall, and let it be exposed to the action of frost through winter.

Prepare cattle yards for the manufacture of manure on as large a scale as practicable—provide plenty of straw for litter—remember, plenty,—and that is a great deal; and if possible, cart on your manure yards a large quantity of swamp muck: or if that cannot be had, simple earth, to mix with the other manure. The labor will be well repaid.

Exercises on Plum Trees.

The insect that produces these unsightly blanches, has not confined its operations entirely to the early part of the season: but in the nursery we have found (2 mo. 18,) several worms that have very recently started into life. Those who are determined to save their trees, should therefore be on the alert.

We have already recommended close pruning as a means of detecting these depredators. The vigor of the tree is not to be injured, while the fruit will be finer, and the branches perceived at a glance. In a bushy tree, it is a tiresome task to discover them all.

It appears that when the female deposits her eggs something is applied to the branch which causes wood to become granular or fungous—a fit for her progeny: and not unfrequently continues to swell when no trace of it is found there. Every exercise is habituated, but some have even

Elder-Berry Wine.

MESSE. Editors:—Having come into possession of several acres of land mostly covered with elder bushes, which promise a great crop of berries, I wish to inquire whether it would be profitable making them into wine; and if so, what is the process by which it is made.

A. SUBSCRIBER.

Chautauque County, N. Y.

REMARKS.—The above is the second inquiry of the kind received by us within a month past. As advocates of temperance we would reply, we do not believe that making wine of any kind will in the end be found profitable; still to gratify our subscribers we give such information on the subject as we find at hand.

The following is from a little English work entitled "The Art of Making Wine from Native Fruits."

ELDERBERRY WINE.—This fruit is excellently calculated for the production of wine. Its juice contains a considerable portion of the fermentative matter which is so essential for the production of vigorous fermentation, and its beautiful color communicates to the wine a rich tint; but as the fruit is deficient in saccharine matter, this substance must be liberally supplied. This wine is much ameliorated by adding to the elderberry juice a small portion of super-tartrate of potash. Dr. Macculloch observes, "that the proportion of this salt may vary from one to four, and even six per cent. The causes of this admissible laxity will appear, when it is considered that the greater part of the super-tartrate of potash is again deposited in the lees. I may also remark, that from two to four per cent. will be found a sufficient dose, in proportion to the greater or less sweetness of the fruit, the sweetest requiring the largest quantity of this salt, and vice versa. The dose of it ought also to vary in proportion to the added sugar, increasing it as this increases."

To every two quarts of bruised berries put one quart of water, strain the juice through a hair sieve, and add to every quart of the diluted juice one pound of lump sugar. Boil the mixture for about one quart of an hour, and suffer it to ferment in the manner before stated.

Or, bruise a bushel of picked elderberries, dilute the mass with ten gallons of water, and having boiled it for a few minutes, strain off the juice and squeeze out the husks. Measure the whole quantity of the juice, and to every quart put three quarters of a pound of lump sugar; and, whilst still warm, add to it half a pint of yeast, and fill up the cask with some of the reserved liquor.

When the wine is clear it may be drawn off from the lees (which will be in about three months) and bottled for use.

For flavoring the wine, ginger, allspice, or any other aromatic substance may be used: the flavoring materials may be inclosed in a bag, and suspended in the cask, not removed when the desired flavor is reached.

The next is from an old work on domestic wine, and, we believe, is the method practiced by the cottagers in England.

"ELDER WINE."—To every two quarts of water, boil and break the fruit through a quart of juice: boil sugar, whole pepper

The Curolio.

Every person who owns a plum tree, ought to feel an interest in the history of the Curolio, for it has been the chief obstacle to raising plums, apricots, and nectarines, where there were trees. We believe it is not known in Europe, though other species of the same genus there, have their peculiar mode of annoyance.

Of the benefit of our circular tin troughs, we can say nothing decisive, because they were not applied till after the Curolio had ascended the trees, and we jarred the trees that had those appendages, as well as the others. To the slaughter that we made of this insect in the early part of summer, we ascribe much of the abundance that our trees have yielded; and in confirmation of this opinion, we may mention that a tree in the fruit garden which had been forgotten, bore three apricots, while another young tree of rather less size bore half a bushel; and we know of no other reason for the difference.

Before this summer we had believed that the young Curolio continued in the fruit till it fell, and only escaped from its habitation after it had lain for some time on the ground. Late observations however, have shown that impression to be incorrect. We found both plums and apricots on the trees, from which the insect had taken its departure through a small orifice cut in the side of the fruit.

We have had some anxiety to ascertain the whereabouts of the old Curolio, after it had ceased to deposit its eggs in the fruit, (which is said by Judge Darling of New Haven to be early in the seventh month.) We therefore spread a sheet under several plum trees, about the middle of the eighth month; and on jarring them violently, caught several, though in far less number than when we last examined the trees about two months before. Indeed, under some trees where we most expected them, we found none. This failure however, may have been chiefly owing to the hot weather, so favorable to the activity of all insects, and which doubtless enabled them the better to hold on. We hope to repeat the experiment in cooler weather.

Improved Hogs in Ohio.

Nowhere in the course of our travels have we observed greater need of improvement in swine than in the State of Ohio. For while it is the greatest pork raising State in the Union, the common breed of hogs is of the very worst description. Our Western New York farmers with their fine Leicesters, Berkshires, Byfields, &c., would be puzzled to find a suitable cognomen for the animals called hogs in Ohio. We are at a loss to conceive from whence they originated; but imagine their form and character has grown out of their uncivilized mode of life; as they seem to be admirably calculated for wood rangers, or for breaking down the large stalks when employed in the field as corn huskers.

A work of reform has begun, however, and the more intelligent farmers have discovered that a saving of about one-half the amount of food, may be effected by adopting improved breeds of hogs, and a more economical mode of feeding. Various crosses of the Leicester, Byfield, Bedford, &c., and thorough bred Berkshires are rapidly multiplying in the State. The latter in particular appear to be in great demand.

MR. MAHARD'S BERKSHIRES—CINCINNATI.

This is the most numerous and (perhaps excepting Mr. Allen's) the most beautiful lot of Swine we have ever seen. Mr. Mahard has been careful to obtain superior animals to breed from, and he displays excellent judgment in their management. He has several fine breeding sows; several boars, and a large number of pigs of various ages. With his pro-

sent facilities he will soon be able to supply the great demand which exists for these pigs in that region.

Mr. Mahard is the proprietor of one of the large pork slaughtering and packing establishments in Cincinnati, and his experience in that business has given him superior knowledge of the relative value of the different breeds of hogs. The following remarks on this subject were written by him for the Western Farmer & Gardener:—

Mr. Editor—You are aware that I am now, and have been ever since 1829, extensively engaged in the pork packing in this city; and I feel that I may without presumption, lay claim to not a little experience in the business. It is fully as much to my interest, and that of every one else engaged in curing pork for market, as the interest of the farmer, that the very best breeds of hogs should be scattered over the country.

When I first entered into the business, the pork brought to us was produced from the same miserable race yet to be found through much the greater part of the West. It yielded us little laid, and the sides were unfit for mess or clear pork—too thin, and only fit for bacon. The first improvement we had was the little chunky China hog—a perfect mass of lard—bams light and too fat—though the waste of offal was trifling. The next we had was the large Warren county hog, requiring years to mature, and then coming in as of enormous weight—a great waste of offal—the hams too large and badly shaped, as was also the shoulder—and the sides, nevertheless of their great size, were thin in proportion. They were still a great improvement. The crosses of these and the Russian and Byfield, in the hands of some of the more judicious breeders, produced a very excellent hog, and we who were the purchasers, were anxious for any improvement on the unprofitable wood hogs usually raised.

Though, as I have remarked, so long engaged in the business of packing, I had paid but little attention to the breeding of hogs, though always keeping a few of the best I could find, on my farm, and improving them to the best of my ability. It was not until some of the part-bred Berkshires were brought to us from Butler and Warren counties, and I was struck with the great improvement in them, on any thing I had yet seen. The perfect manner in which they were intended—the extraordinary length of body, and the thinness of the side meat—their small, yet thick, fleshy shoulder—the great weight and handsome form of their hams—the great yield of lard, and the little waste of offal, either of inside waste, or head and bone, proved to me that they were a something entirely different and altogether superior to any other breed within my knowledge. On making further enquiry respecting them, I found them equally advantageous to the farmer and drover, as to the pork packer. Prolific and easy kept; maturing early and fattening kindly to as great weights as were desirable; stamping their own character strongly on any other breed with which they might be crossed; and travelling well to any reasonably distant market.

I had before this, been breeding hogs for sale, and seeing at a glance the great advantage it was going to be to me in my packing business, to have such a hog as the Berkshire in general use, I at once engaged in it largely.

True it is that I cannot give up my farm and my attention and capital, to the breeding of fine stock, without a prospect of making money by it; but that was the secondary object I had in view—my pork-packing business was of the first importance to me. I saw and dreaded the efforts that were made to introduce an extremely large hog into Kentucky, for I had about this time transferred my pork business to that State, and had gone to very great expense in erecting an extensive establishment back of Covington, and intended making my entire purchases in the State.

We can make no use in this market, of animals weighing from 400 to 600 pounds, even though they may be well fattened. A hog of the proper form and quality of meat, that matures at ten or twelve months old, so as to fatten properly, and then weighs from 200 to 300 pounds, is the sort for which we will give the highest price, because it yields us the greatest profit. And most assuredly it will also pay the farmer best. We have no population to supply, that will consume large, coarse, indifferently cured meat. Our principal demand is for city and family use, both here and in the cities of the south and east. The hams is with us the most valuable part of the hog, and the celebrity of those cured in Cin-

cinnati is now great. This part must be heavy with out being large—round, thick and plump—the flesh though principally lean, yet marbled with fat. Next to the ham, the hind and side meat yield us the greatest return—the former must be abundant in quantity and fine grained; which never is the case with any hog until he has somewhat matured; the latter must carry thickness throughout, having no thin fleshy parts, and must be fat. And last we need the shoulder and the jaw.

Many of the Boston and Richmond dealers, and those from the other cities in the East and South come here annually to have meat packed; they select such a hog as I have described, and will buy no other if they can help it.

For my own part, and for my use for packing, I want neither an extravagantly large hog, nor yet very small one. A hog that has to be fed two winters, never will pay first cost; if he can be had sufficient size without wintering at all, so much the more profit. A spring pig killed in the fall at 50 pounds nett, will evidently pay better than if the same hog had been kept over winter, and reached the second fall 500 pounds nett.

I have been speaking now as a pork-packer, not as a breeder; and what I have said, I say in all sincerity. I have no desire to injure the business of any other breeder of improved hogs, nor to prevent any continuing their improvements to as high a point as they please. But I do regret to see gentlemen of science and experience going back to a large coarse hog, such as the Woburn, Irish Grazer, &c. Leicester, when they can procure a breed so infinitely superior—the improved Berkshire.

JOHN MAHARD, Jr.

Cincinnati, July 5, 1841.

From the Farmers' Register.

Disputed Questions in Agriculture.

August 2, 1841.

DEAR SIR:—It may perhaps be deemed a very useless, if not presumptuous attempt in any individual to suggest any means of settling for ever even a small portion of those apparently interminable controversies in regard to certain agricultural matters with which our agricultural papers have been and still are often filled. But the very circumstance of their being continued, I think, a conclusive proof that each disputant believes that they may be brought to a conclusion; provided a proper course was pursued for the purpose. In the hope, therefore, of recommending such a course, I will proceed to notice a few of these controversies, together with the manner in which the questions that gave rise to them have been treated. There has been such, in most instances, as to serve scarce any other purpose than to crowd our books of husbandry with communications, the authors of which appear more anxious to put each other in the wrong, than to get the agricultural public right, in regard to subjects of controversy. The effect of most of these articles has been to aggravate the unreasonable prejudices against agricultural works; to perplex great all young farmers who read for information; and measurably to weary old ones, in witnessing and waste of words—uttered, processedly, to give light, but in reality, often making confusion worse founded. Instead of giving us accurate details of experiments, most carefully made, together with results, which alone can satisfactorily settle matters, we find, in a much of what they write, little but speculative opinions and theoretical arguments, or ill-digested and unsound conclusions from some things which they call experiments, but which are really deficient in all the particulars that it is essential to notice most accurately, before they can be entitled to any weight.

This, I think, may truly be affirmed of nearly that I have read of what has been written on the following controverted subjects:—
Whether vegetable manures should be turned under in their freshest state, or left on the surface of the land until it is cultivated?
Which is the most productive variety of Indian Corn in each section of the country, and the climate, soil, and situation is nearly the same?
At what distances is it best to plant, and by what modes of culture corn will produce most net profit?
Whether it is injurious or beneficial to cut the roots of corn during its growth?

And last, though not least, what is the true opinion in regard to that great "pans animum" in agriculture, the *concordability of wheat into wheat* chess?

Now, in my humble opinion, all these still undetermined questions might have been settled many years ago, if that who were most interested in them had taken the trouble to make a few such perfectly accurate experiments as any cultivator of his own or others' land might very easily make; and to publish the results of the same in our agricultural journals, instead of the numerous vague speculations and inconclusive statements on the foregoing subjects, with which these journals have so often been filled. Whether I am right or wrong in this opinion, let your readers determine, after considering the following series to which I respectfully invite their attention.

How easy would it have been, in order to settle the question, for an individual to select sufficient territory to desire that it should be settled, to spread vegetable manure equally over a small determinate quantity of land, and then, alternately to plough it under, and leave it on the surface of exactly equal portions of this land, and to compare by accurate measurement, the produce of each portion?

Would it not have been equally easy to settle the second controversy, by planting a like determinate quantity of land with as many varieties of Indian corn as the experimentalist wished to compare together, giving to each exactly equal portions of the land, the same distances between the hills and rows, the same number of stalks in a hill, and precisely the same culture; and then accurately to measure the produce of each portion? To prevent the produce from being much affected by intermixture, an oblong form might be given to the land on which the experiment is made, and the rows planted across, to the number, say, of 12 or 15. Then, by comparing an equal number of the middle rows only, the experiment would approach sufficiently near absolute accuracy to satisfy even the most skeptical.

To ascertain the best distances at which to plant in the richest, the poorest, and the medium quality of land, what difficulty would there be in trying such as are most approved by practical men, on a determinate quantity of land of either of the foregoing qualities, giving to each distance exactly the same portion, and then measuring accurately the produce of each portion, as in the other experiments?

With a view to ascertain the best modes of culture, it is possibly to be satisfactorily done without comparing them at the same time, on exactly equal portions of land which is the same in soil, fertility, and situation; and can there be any great difficulty, expense, or trouble in making this comparison? Yet who, among our numerous writers on the subject has ever reported any such experiment? This, if it ever had been properly made, would have settled for ever, whether it benefits or injures corn to cut the roots, since they will be, more or less, by every mode of culture which has ever yet been tried. If the portion and on which fewest roots had been cut produced the most corn, and that portion yielded the least, were the root-cutting had been greatest, then surely the first mode of culture would be preferred by every body, but the obstinate fools who have no better reason for any thing they do, than that they have always done the same.

With respect to the cheat or chess controversy, in almost instant to open my lips, for most of our writers who maintain that cheat is the produce of heat, seem to have worked themselves up into such volar and bellicose humor on the subject, against those who maintain the negative in this matter, that it is quite a painful thing to offer any argument in support of my opinions. I will therefore content myself with only asking a few simple questions. Is it among the unknown things of this world to ascertain the truth in regard to this controversy? If it is, why add another word to be ever said or written about it? I think not, can any one oblige me so far as to name a single experiment, among all which have been so often and stated as proofs that wheat will turn to grass, which is not most palpably defective in several essential particulars? I can truly say that I have never seen even a solitary one, but that which was made in 1833 by Messrs. Thomas and William Jackson and yourself. This is to be found in the first issue of your Register, on the 33d and 34th pages; and to my mind is most conclusive proof that for wheat to produce cheat, is quite as great an impossibility as for "thorns to yield grapes," or for daisies to produce figs. I will further ask, if any experiment had been made with less particularity and accuracy than the one just referred to, ought to be regarded, even in the highest degree, as contributing towards settling this long and long agitated controversy, or indeed, could be entitled to a place in any of our agricultural papers? None, I think, who really desire to come

at the truth in this matter could reasonably object to the editors of these papers requiring equal or even greater accuracy and minuteness in the experiments which they may be required to report for either of the parties concerned. If the zeal of those who maintain the affirmative in this controversy, be not sufficient when stimulated by the hope of victory, to impel them to take the trouble of making such experiments as have just been suggested, I would beg leave hereby to call their attention to your pledge—made a few months ago, to pay one hundred dollars—not "in rags," but in good lawful money, to any one who can prove by similar experiments, well authenticated in all their particulars, that he has succeeded in converting wheat into cheat.

I would mention several other subjects upon which much difference of opinion has been expressed, for many years past, and which still occasionally appear in our agricultural papers. Serving no other purpose than to show the great disproportion in number between the multitude who prefer writing out and publishing their conjectures on these topics, and the few who choose the less easy, but more troublesome road of accurate experiments to solve their doubts. But until this be generally done in regard to all matters which can be settled by the experimental process, the readers of our agricultural journals, (good as I admit most of them to be) will have to pay for much that affords them little, if any satisfactory information. If action, action, action, be essential to form the finished farmer, I would say that experiments, experiments, accurate experiments are equally, nay, more important, to form the complete farmer. I remain, dear sir, yours very sincerely,

JAMES M. GARNETT.

From the New England Farmer.

Hay Seed upon Inverted Sod.

Many of our moist lands upon our dry uplands and the bog-meadows, though natural to grass, occasionally need renovating. As long as a common top-dressing will call a good crop, nothing more should be done than to apply the manure on the surface. But when the better grasses have run out, and when moss begins to collect upon the surface, it is necessary to plough such land. But where the plough will do its work tolerably well, it is not necessary to plant. These lands which are wet and heavy in the early part of the season, and which bake in the scorching months of July and August, are not profitable for tillage.—They may yield a crop of potatoes, and possibly of corn, but the chances for this are small, and it is usually bad working these wet spots in the early part of the season. The best way to treat them is, to turn the land over as soon as it can conveniently be done after the crop of hay has been removed; to plough in such direction that the dead furrows shall come in suitable places for surface drains, to roll well; and then put on a dressing of compost. When this has been done, sow hay-seed and harrow thoroughly. Then use the roller again, and the next season you may obtain a fair crop of hay, and the following year you probably will get a heavy burden. Herds grass is better for these moist grounds than clover or red-top. No one who has been accustomed to this process will ever think of tilling any wet lands that can be laid over smooth by the plough.

The process here recommended has been repeatedly urged upon our farmers, by Mr. Buckminster, editor of the Boston Cultivator; and as far as he has influenced them to comply with his advice in this matter, he has rendered them good service.

This is the proper season of the year for working all low lands, and it is by attention to them, that our farmers generally must hope to thrive. They repay the labor and expense bestowed upon them better than most of the high grounds.

Cactus Triangularis.

The Charleston Courier says, we were among the gratified beholders of the magnificent and magnificent bloom of this rare plant at Mr. L. B. Baker's on Wednesday night last. The plant is in a state of most luxuriant vegetation, growing in a box containing turkeys, superficially covered with sand, and of course deriving its nourishment chiefly from the atmosphere. When we saw it, thirteen magnificent flowers, gigantic in size, yet graceful in form and exquisite in beauty, simultaneously expanded their petals to delight the eye, while at a little distance a pleasant fragrance was diffused. The evening before, seven flowers, on the same plant, had commenced and closed their ephemeral bloom. We carried away one of these rich blossoms of night, kindly pro-

vided to us by their proprietor, and found to our agreeable surprise that, by depositing it in a jar of water, its existence was prolonged, and it bloomed in the heart of the rose more as well as the curtnaid night. The bloom of this plant is one of nature's mysteries—floral beauty the most rare and exquisite, destined only to hang on the brow of night, like a rich jewel in the Ethiopian's ear, and to close its petals in early and lovely death as midnight tolls its knell—dependent too wholly on human aid to prevent it from being born to blush unseen and waste its sweetness on the desert air.

A fine specimen of this beautiful Cactus owned by Mr. Otis Everett, jr., which opened its blossoms on Wednesday last, and was witnessed by many of his friends, all of whom speak in the highest terms of its beauty and fragrance. The flower is very large, of a pure white, with 60 or over 18 or 19 petals 6 inches in length. It commenced opening at 4 P. M. was half open at 7, fully expanded at 10, and closed next morning at 7 o'clock. This plant came from the interior of the island of Cuba. Truly it is said that this is one of "nature's mysteries."—Boston Transcript.

The Pear Tree.

We are told that many persons are afraid to plant pear trees lest they should die with the fire-blight; that they have done their best to save the trees, but all to no purpose; and that they now settle down in despair. In reply to this melancholy account however, we can repeat the assurance that we have not lost a single tree by the fire-blight in twenty years. It has been in our fruit garden several times, but always seemed to walk out again as fast as we did; for we cut off the injured branches without delay and burnt them immediately,—destroying as we believed, the whole colony of insects that had committed the depredation.

As soon as the leaves begin to blacken on the branches, for two feet or more near their extremities, let the owner waken up at once, lay aside all other business, and proceed with as much zeal to the task as he would drive the pigs from his garden. We are satisfied it is the putting off till a more convenient season in such cases, that proves so fatal to the pear tree. The stable door may be locked when the horse is stolen; and the limb may be cut off when the insects are gone to another part of the tree. Did you cut off the limb below where it was dead, say a foot or more? "No—we only cut off the dead part!"—leaving the insect at work below. Did you burn it when it was cut off? "Why—no—we left it under the tree!"—for the insect (if there) to go up again at his leisure.

Culture of Silk.

It is indeed "an ill wind that blows nobody good." The subsidence of the mulberry speculation is followed by cheering attention to the manufacture of silk. The immense quantity of trees lately propagated for speculation, essentially aids those who now embark with a view of pursuing the Silk Culture as a steady business. The vice of speculation is thus rendered tributary to honest industry; and we confidently predict that the crop of silk, in three or four years, will prove that, whatever evils may have deluged the country through the speculating mania, the "mulberry fever" is followed by healthy and efficient action in the great cause of rendering our country independent of foreign nations for an ample supply of Silk.

We congratulate thousands of thrifty farmers upon the pleasant and profitable employment which the silk business affords to the females and children in their families—affording means and inducements for industry that may essentially serve those families throughout life—promoting comfort and independence, and yielding returns that would guard against pennury distress, should the ordinary means of support be curtailed by the loss of husband or father, or by other reverses of fortune.

R.

A Visit to Brockport and Clarkson.

In the early part of September, we took a ride to Brockport, in company with L. B. LANGWORTHY, Esq. and Mr. JOSEPH ALLEN, with the intention of viewing the firm and silk cocoonery of Mr. George Allen, and visiting a number of the good farmers in Sweden and Clarkson. Owing to the excessive warmth of the weather, and some indisposition on our part, we did not accomplish as much as we intended; still, we saw much that was highly interesting to us, and some account of which may gratify our readers.

Mr. Allen's Farm

Is situated on the south east side, and within the corporate limits of the village of Brockport. It consists of 26 acres, embracing a great variety of surface and kinds of soil, now under good cultivation, but originally quite rough and some parts so wet and boggy as to be utterly useless. The improvements which Mr. Allen has effected, are quite surprising, and reflect great credit on his skill and enterprise. His system of

Under-Draining and Stock Watering

Is very perfect, and worthy of imitation. He has made about 80 rods of under-drain, by means of which he has not only reclaimed several acres of valuable land, and beautified his premises, but by placing reservoirs in the drains, and putting down conducting logs, he has obtained an abundant and never failing supply of pure water, at his yard and buildings. In constructing drains, Mr. Allen has adopted several modes, according to the nature of the soil or other circumstances. Where the soil was firm, and the materials at command, the drain was formed of loose stones, first covered with turf, then with earth. At other places it was formed by nailing two narrow boards together, like a trough, placing it with the angle downwards for the bottom of the drain, then putting small sticks across and covering it with another board, so as to leave a crevice for the water to enter under the cover; the whole surrounded with broken charcoal to facilitate filtration and preserve the boards from decay. Another method, and to us a novel one, was practiced where the sub-soil was quicksand, and where a board or stone drain would soon fill up: he went to the woods and cut beech brush, consisting of branches one inch or less in diameter, with the spray on, which he tied up in small bundles or faggots, eight or ten inches in diameter; these he placed lapping each other in a row in the bottom of the drain, having first laid down a bed of straw. The faggots are then firmly surrounded and covered with straw, and on this is thrown the turf and rubbish, then earth or sand, the whole firmly pressed down. How long such drains will endure without decaying or filling up with quicksand, we cannot tell, but they seem to answer the purpose admirably, and certainly are not very expensive.

Mr. Allen is also largely engaged in

Silk and Mulberry operations.

As our readers are already aware, by his communication which we published last month, and to which we now refer for an account of his cocoonery, &c., in order to prevent repetition. We were somewhat disappointed in the appearance of the cocoonery, having expected to see a better finished building and more expensive fixtures; but as it is, it goes to prove one important fact, namely, that large expenditure of money is not necessary for a commencement. Owing to a want of experience, and some mismanagement, Mr. Allen was not very successful with his early crop of worms; but the later hatchings, of which he has an immense number now feeding, appear very promising. Some were beginning to spin when we were there. The cocoonery is fitted up with Morris' Frames, which undoubtedly combine more advantages than any other contrivance for feeding silk worms. Mr. Allen is so well convinced of their utility, that he has

become joint proprietor with Mr. Morris for the right of all the districts of Western New York lying west of the Genesee River.

The mulberry plantations and nurseries of Mr. Allen far exceeded our expectations. He had no estimate of the exact number of trees, but thinks there is over 200,000. They embrace the *M. alba*, *M. multicaulis*, and several other varieties. Mr. Allen has collected a vast fund of information on the subject of silk culture, and appears to take pleasure in communicating it to others.

The Farm of Mr. S. D. Baldwin

Was the next place we visited. It consists of 100 acres of very superior land, only half a mile from the village of Brockport, on the south west side. Mr. Baldwin is very successful in the culture of wheat, Indian corn, and other ordinary crops; but what most attracted our attention was 17 acres of broom corn.—This was of an unusually fine growth, very tall and thick, and being just in full head, it presented a most luxuriant spectacle. Mr. B. has long been in the practice of raising broom corn, and making brooms. It affords profitable employment for the winter months. We found another somewhat unusual crop on this farm, but we doubt whether the owner deserves much credit for it, although it looked very promising, for it was nothing but weeds—yes, and the vilest of all weeds—*Tobacco*! Mr. B. is quite confident that this crop can be raised with advantage on his land; but we shall not be surprised nor sorry if he is disappointed when he brings it to market.

In horticulture, Mr. Baldwin is sadly deficient; but we think he must be something of an amateur in *floriculture*, for we observed many curious if not rare plants in his flower garden in front of the house; such for instance as *Phytolacca decandra*, (Poke weed), *Rumex sanguinea*, (Dock), *Chenopodium rhombifolium*, (Pig weed), &c. &c.

After we had partaken of the hospitalities of his table, Mr. Baldwin conveyed us to Clarkson, where we took a stroll over the large and beautiful

Farm of Dr. Abel Baldwin.

His land extends from the Ridge Road to more than a mile in extent on the plain below. The soil is generally good, though much of it is rather heavy. It formerly produced large crops of wheat, but Doct. B. says it has lost much of its wheat growing properties, and he now intends to try the effects of lime and deep ploughing. If he can obtain a good *subsoil plough*, he promises to give it a trial. He is doing considerable at under-draining, and says he has observed that the heaviest wheat is produced where the earth has been thrown out in making drains; an argument which we have before adduced in favor of deep ploughing on such lands. Dr. B. keeps a large number of cattle, and cuts much grass. On his largest meadows he has adopted a system of

Irrigation

Which he finds of great advantage particularly in dry seasons like the past. A stream formed by a waste-way in the canal, runs through his farm, and when required a portion of the water is conducted on to this meadow in such a manner as to submerge nearly the whole surface; from which it is again conducted when necessary by opening several drains. We wonder that irrigation is not more practiced in this country, especially in places such as we often see, where it could be done with trifling expense. In England, notwithstanding the moisture of the climate, irrigation is much practiced and found to be of great advantage.

Dr. Baldwin has a fine collection of cattle consisting both of improved and common breeds. A lot of steers and grade heifers struck us as being very beautiful. His cows are also very fine, both of improved and selected common stock.

Disease Among Calves—Inquiry.

Dr. Baldwin informed us that in the month of August he lost twelve very fine calves about three months old, by a strange kind of epidemic that attacked them; the cause and cure of which neither he nor his neighbors understood. The calves were very large and thrifty; all suckled the cows, and gave no evidence of ill health till they suddenly became dumpy, refused to suck, and in 24 hours died. On removing the skin large black spots were seen on the body; and on examination the second stomach was found to be dry and hard. We presume some of our readers can throw light on this subject, and hope they will do so.

A Large Grape Vine.

In his fruit garden Dr. Baldwin has the largest and most productive grape vine we have ever seen in this country. It is an American variety called *Winne*, resembling the *Isabella*. The branches run along a trellis and over the tops of several fruit trees, covering a space we should judge, of at least forty feet square. We tried to make an estimate of the number of clusters of fruit but time and our patience failed us. We guessed there were about 3000; they are not as large as the foreign varieties.

Lime as a Manure.

Lime has been considered the foundation of all good husbandry; for where it is not found naturally in the soil in sufficient abundance, it has generally been the task of the good husbandman to supply the deficiency.

It may be doubted however, whether lime is the only mineral capable of rendering soils perpetually fertile. The black sandy prairies of the Western States seem to furnish an exception. We have formerly stated our views on this subject, and now repeat them in the hope of inducing some able chemist to furnish an accurate analysis.

Much of the prairie on the east side of the Wahash river, which includes the town of Vincennes, was a common when we visited that place in 1816; and had probably been in that condition for more than a century. In many places, it was entirely bare—in others covered by coarse grass or perennial weeds; but wherever it was cultivated, the vegetation was most luxuriant. The soil appears nearly black, but glistening in the sun. This reflection is from the white sand which constitutes a large proportion, while the dark color is derived from the finely divided matter. On treating it with diluted muriatic acid, we discovered no effervescence, and concluded it contained no carbonate of lime. When burnt, it was scarcely diminished in quantity, showing it contained but little carbon or vegetable matter. By this process, however, it was changed from black to a reddish cast; and we inferred that the fertilizing principle was a mineral, and probably a sulphuret, but our examination extended no further.

These tracts however, form but a very small proportion of the country; and we recur to lime as the general fertilizer. We intend not indeed to discuss the subject at large, but simply to point to errors that agriculturists have sometimes adopted.

Lime should always be applied in the form of powder; and it matters not whether the reduction of the stone to this state, be performed by *grinding or burning*; but the latter method being the easier, has been generally adopted. It is true there is a great difference between the comminuted stone and quick lime, just slacked, but the latter when spread out on the ground becomes carbonated so speedily, that both have the same effect, as manures. A solution of quick lime is of no particular use in agriculture; an intimate intermixture with the soil is the principal thing; and to prevent its becoming clotted, a most useful precaution.

To grind magnesium limestone, if practicable, would

be far preferable to burning it; because in that case, neither the lime nor the magnesia would be caustic. When it is burnt, however, the bad effects of the caustic magnesia (hot lime) may be avoided by scattering it in powder, over meadows or pastures at least one summer before they are to be broken up. Falling amongst the decaying blades of grass, which omit carbonic acid, the magnesia imbibes it and becomes mild, which it would fail to do on a bare soil, as it attracts that acid more feebly than lime, and the latter, of course, must be always served first.

Lime loses none of its qualities as a manure by old age or exposure to the weather. Hence the refuse that collects round lime-kilns, is well adapted to the farmer's use, and the value of the mass will be regulated by its freedom from small stones and other impurities. On the same principle, the plaster from old walls and ceilings, should *never be thrown into the road*; but broken up with a pounder, and applied to the garden, the field, or the meadow. It is a valuable manure, and more especially for heavy soils. †

Blossom Buds perishing in Winter.

A correspondent wishes to know why the blossom buds of the peach and apricot perish in winter? and so, if there is any way to prevent such loss?

A flowing of the sap late in autumn, or in winter, followed by intense cold, has long been considered as the cause of this damage; and we have no doubt of its being the true cause; for these buds can endure a very low temperature, if they are not *started* by unreasonable warmth. We have no knowledge that they have ever been killed in this condition, by the severest cold of this climate—perhaps ten or fifteen degrees below zero; and in the elevated region between the squabanna and the Delaware, they have probably endured a depression of ten degrees more. Our cold winters, when not interrupted by thaws, have generally, if not always, been succeeded by fruitful seasons.

In the winter of 1831-2, the snow drifted around a peach tree in our fruit garden, so that one low limb was entirely buried. This rough weather was succeeded by a thaw soon after New Years, and the thaw intense cold. Peaches were very scarce in the following season. The highest limbs—the very tops—which the reflected heat from the ground could scarcely reach—had a few, while the limb which was buried in the snow, was loaded down with fruit.

The same effect was produced on a limb that rested on the roof of a building, and was covered up in a drift. Warm winds that *started* the other buds, passed over without touching, and left it torpid.

On bleak northern aspects, we believe the peach is generally productive in this climate; and we obtain the following cases on the same principle:—In many years, we resided in a wide valley bounded on two sides by high hills. In the valley, the peach was in an uncertain crop; but on the hills it rarely failed.

A careful observer who lived in a more sheltered part of the same district, assured us that the peach with them was unfruitful as often as six years out of seven. In valleys, the temperature is more variable than on the hills—warmer at one time and colder at another; for it has been ascertained that in severe but dry weather, the cold air settles down in the lowest places.

Last winter was milder than usual; and yet we had the shrubs more injured than in seasons of intense cold. It appears that in these shrubs the sap had *started*, and the sharp frosts that followed were destructive to a part of their branches. Amongst these, were Purple Fringe tree, and the Pyracantha; but *Ponasia phyllgroides*, from Syria, more tender than the other, escaped without any injury, and is now producing seeds for the first time.

The Antwerp Raspberry may also be mentioned, which with us is generally hardy; but at Marietta, in Ohio, more than three degrees further south, "it requires to be laid down every autumn," says Doctor Hildreth, "and covered with earth or straw to protect it from the freezing and thawing of our variable winters. Plants which stand under the north side of a fence or a building, bear the winter in a manner unharmed." This is also the case with the Madeira grape vine, and Greville rose, both of which are killed if exposed to the mid-day sun of winter, but live uninjured if grown in a northern shaded exposure."*

Treading down the snow so as to accumulate a compact mass round the tree, and then covering it with straw, has been found useful. We have seen an apple retarded in its vegetation for a fortnight in the spring, by piling wood round it; but the weather here is so variable and uncertain, that what was useful in one season, may be useless in another. †

Importance of Color—Painting Wagons, &c.

The importance of dark and light surfaces, as we believe, but little appreciated in an economical point of view. The difference between rough or darkened, and polished metallic surfaces, in absorbing and radiating heat, is familiar to every student in chemistry. A housewife would be considered ignorant, who did not know that bread would bake more rapidly on an old or blackened metallic dish, than on a new or bright one; that water cools more slowly in a bright tea-pot, than in any other; that a stove pipe of Russia iron heats a room less than a pipe of common or rough iron; that water can scarcely be made to boil in a new tin vessel, with a charcoal fire, until its bottom becomes blackened with smoke;—all of which plainly show the rapid absorption and radiation of heat by rough and blackened surfaces, and the reverse by bright or reflecting ones.

The influence of color alone, on absorption, is most strikingly exhibited in case of solar heat. Bodies of a black color, are found soon to become heated in the sun, while white ones are scarcely affected. This important fact should be borne in mind, in the preservation, by paint, of all implements or machines of whatever kind, which may be injured by the action of the sun's rays. Wagons and carriages, especially, which during use must necessarily be more or less exposed, should always be of some light color. A carriage of a light yellow or ash color, is almost inconceivably less heated, cracked, and warped, than one of a dark brown or black. And however unfashionable such light colors may be, we have no doubt that if vehicles generally, were painted with such, that many thousands of dollars would be saved annually, by preventing one of the most powerful causes of weakness and decay in these costly appendages to every man's domestic establishment.

A Visit to Wm. C. Cornell's

We made a visit some days ago to the farm of our friend Cornell in the south part of the town of Henrietta, about seven miles from this city. Mr. C. was formerly a merchant in the city of New-York, but his business not being favorable to his health he left the city and turned his attention to farming. In selecting a location we think he manifested good judgment as well as taste; and in the arrangement and general management of his farm we see good evidence that the systematic mind of the merchant is no disadvantage to the farmer. The dwelling house is in good keeping with the farm; every thing within and around giving an air of comfort and refinement. Mrs. C. although brought up in the city appears to be quite at home, and well contented with a country life. We could discover nothing wanting except a *better garden*, to

* Hovey's Magazine of Horticulture, for December, 1841.

make the place all that any reasonable man could wish.

The farm consists of 100 acres of excellent land, beautifully undulating, and well watered with springs. It is divided off into 8 or 10 small fields, and all well cultivated. Mr. C. is very successful in raising wheat, and his practice is somewhat peculiar. He has promised to furnish our readers an account of his experience in this business, and also in raising Indian corn, of which we saw a remarkably fine field. We advised him to offer his corn crop in competition for the county premium, and if he does so we think he will gain it.

In farm stock Mr. Cornell has a very choice, though not very large collection, embracing the most approved breeds of cattle sheep and swine—Here we see the true system exemplified—a small farm, in small fields highly cultivated, with a limited amount of stock of the best breeds. This is what we call *orthodox farming*. The sheep in particular, struck us as being very superior. He has nearly one hundred head, part pure Cotswold, and the others 3/4ths of that blood, crossed with the Leicester. We regret that Mr. C. did not make arrangements to take his thorough bred sheep to the Fair at Syracuse, but the distance, and the difficulty of procuring a boat to take them prevented. He is fully convinced that the Cotswold sheep are the most profitable breed for our farmers.

By an advertisement on our last page it will be seen that Mr. Cornell offers to dispose of part of his stock, and we advise those in this region who wish to purchase to go and see them.

Crops in South Venice in 1841.

WHEAT.—This crop is not so good as last season. I think it cannot be called more than half of an average yield; the berry is fine however. Many fields of wheat were nearly destroyed by the Stein Crot, (Red Root) which is making ruinous inroads upon us. *Spring wheat* was but little sown this year, and did not turn out well.

GRASS.—More grass was cut in this town this year, I think, than last. The rain in May gave the meadows such a start as to prevent the subsequent drouth from seriously effecting the crop.

CORN looks very good, considering the season. The dry weather however has so affected it that our farmers will not probably have more than enough for their own consumption; consequently the price must be high.

PEAS.—This crop is very good—better than last season. A larger quantity than usual were sown this year—Many farmers prefer them to corn for fattening pork.

OATS have done well this year—I think they will yield better than last season.

BARLEY is good, what little was sown.

BUCKWHEAT was but little sown, but looks well—will be a good crop if not injured by frost.

FLAX.—The cultivation of this crop is nearly abandoned, owing to the labor required in manufacturing the cloth. What little was sown looks very well.

POTATOES were much injured by the drouth, and I did not yield well, however there will be enough for our own consumption.

ROOT CROPS generally will fall much below an average yield; but are not very extensively raised here.

FRUIT is very plenty, save peaches. I think there is more fruit than last year. On the whole I think the crops in this region are as good as in any other part of Western New-York; and we have abundant reason for gratitude to Him who has given us these necessities and comforts of life.

Respectfully yours,

W. S. TUPPER.

South Venice, Cayuga Co., Sept. 11, 1841.

On the Moisture of the Soil.—Watering.

We presume that almost every cultivator of the soil in this country, has, during the past season, felt the need of more knowledge respecting the operation and effects of moisture on vegetation. It is a subject which every farmer and gardener should fully understand; we therefore bring it before the minds of our readers while they realize its importance. The following article is from "Lindley's Theory of Horticulture," with notes by A. J. Downing and Dr. Gray.—It is not long—read it carefully.

It has already been shown that water is one of the most important elements in the food of plants, partly from their having the power of decomposing it, and partly because it is the vehicle through which the soluble matters found in the earth are conveyed into the general system of vegetation. Its importance depends however, essentially upon its quantity.

We know, on the one hand, that plants will not live in soil which, without being chemically dry, contains so little moisture as to appear dry; and on the other hand an excess of moisture is, in many cases, equally prejudicial. The great points to determine are, the amount which is most congenial to a given species under given circumstances, and the periods of growth when water should be applied or withheld.

When a plant is at rest, that is to say, in the winter of northern climates and the dry season of the tropics, but a small supply of water is required by the soil, because at that time the stems lose but little by perspiration, and consequently the roots demand but little food; nevertheless, some terrestrial moisture is required by plants with perennial stems, even in their season of rest, because it is necessary that their system should, at that time, be replenished with food against the renewal of active vegetation; hence, when trees are taken out of the earth in autumn, and allowed to remain exposed to a dry air all the winter, they either perish or are greatly enfeebled. If, on the other hand, the soil on which they stand is filled with moisture, their system is distended with aqueous matter at a time when it cannot be decomposed or thrown off, and the plant either becomes unnaturally susceptible of the influence of cold in rigorous climates, or is driven prematurely into growth, when its new parts perish from the unfavorable state of the air in which they are then developed. The most suitable condition of the soil, at the period of vegetable rest, seems to be that in which no more aqueous matter is contained than results from the capillary attraction of the earthy particles.

Nevertheless, there are exceptions to this, in the case of aquatic and marsh plants, whose peculiar constitution enables them to bear with impunity, during their winter, an immersion in water; and in that of many kinds of bulbs, which, during their season of rest, are exposed to excessive heat. The latter plants are, however, constructed in a peculiar manner: their roots are annual, and perish at the same time as the leaves, when the absorbent organs are all lost, so that the bulb cannot be supposed to require any supply of moisture, inasmuch as it possesses no means of taking it up, even if it existed in the soil. This will be again adverted to in a future chapter.

It is when plants are in a state of growth that an abundant supply of moisture is required in the earth. As soon as young leaves sprout forth, perspiration commences and a powerful absorption must take place by the roots, the younger the leaves are the more rapid the perspiratory action; their whole epidermis must, at that time, be highly sensible to the stimulating power of light; but as they grow older their cuticle hardens, the stomates become the only apertures through which vapor can fly off, and by these even the most minute are either choked up, or have a diminished irritability. As a general rule, therefore, we are authorized to conclude that the ground should be abundantly supplied with moisture when plants first begin to grow, and that the quantity should be diminished as the organization of a plant becomes completed. There are, however, some especial cases which appear to be exceptional, in consequence of the unnatural state in which we require plants to be preserved for our own peculiar purposes. One of the effects of an extensive supply of moisture is to keep all the newly formed parts of a plant tender and succulent, and therefore such a constant supply is desirable when the leaves of plants are to be sent to table, as in the case of spinach, lettuce, and other domestic annuals. Another effect is, to render all parts naturally disposed to be succulent much more so than they otherwise would

be; thus we find market gardeners digging their strawberry plants with water while the fruit is swelling, in order to assist in that, to them, important operation. While, however, in this case, the size of the fruit is increased by a copious supply of water to the earth, its flavor is in proportion diminished; in consequence of the rapidity with which the strawberry ripens, and perhaps the obstruction of light by its leaves, the excess of aqueous matter taken into the system cannot be decomposed, and formed into those products which give flavor to fruit; but it must necessarily remain in an undiluted condition.

It is for the reason just given, that the quantity of water in the soil should be diminished when succulent fruit is ripening; we see this happen in nature, all over the world, and there can be no doubt of its being of great importance. Not only is the quality of such fruit impaired by a wet soil, but the best has been shown, but because of its low perspiratory power the soil will burst from excess of moisture, as occurs to the plum and grape in wet seasons. The nicotian, although an apparent exception to this rule, is not really so; that fruit acquires its highest excellence in countries where the roots are always immersed in water, as in the floating islands of Cheshmere, the irrigated fields of Persia, and the springy river beds of India. But it is to be remembered that the leaves of this plant have an enormous respiratory power, arising partly from their large surface, and partly from the thinness and consequent permeability of their tissue, so that they require a greater supply of fluid than most others; and, in the next place, the heat and bright light of such countries are capable of decomposing and altering the fluids of the fruit with a degree of rapidity and force to which we here can have no parallel. In this country the melon does not succeed if its roots are immersed in water, as I ascertained some years ago in the garden of the Horticultural Society, by repeated experiments. Melons were planted in earth placed on a tank of water, into which their roots quickly made their way; they grew in a curvilinear iron hot-house, and were trained near to the glass, and consequently were exposed to all the light and heat that can be obtained in this country.—They grew vigorously and produced their fruit, but it was not of such good quality as it would have been had the supply of water to the roots been cut off. Thus, in the tropics the quantity of rain that falls in a short time is enormous; and plants are forced by it to a rapid and powerful vegetation, which is acted upon by a light and temperature bright and high in proportion, the result of which is the most perfect organization of which the plants are susceptible; but, if the same quantity of water were given to the same plants at similar periods in this country, a disorganization of their tissue would be the result, in consequence of the absence of solar light in sufficient quantity.

The effect of continuing to make plants grow in a soil more wet than suits them is well known to be not only a production of leaves and ill-formed shoots, instead of flowers and fruit, but that the water is in great excess, of a greenish yellowish appearance, owing, as some chemists think, to the destruction by a blue matter which, by its mixture with yellow, forms the ordinary verdure of vegetation. If this condition is prolonged, the vegetable tissue enters into a state of decomposition, and death ensues. In some cases the joints of the stem separate, in others the plant rots off at the ground, and all such results are increased in proportion to the weakness of light, and the lowness of temperature. De Candolle considers that the collection of stagnant water about the neck of plants prevents the free access of the oxygen of the air to the roots; but it seems to me that much more mischief is produced by the coldness of the soil in which water is allowed to accumulate. It is also probable that the excretion of carbonated hydrogen gas is one cause of the injury sustained by plants whose roots are surrounded by stagnant water; but upon this point we want much more satisfactory evidence than we yet possess.

It is because of the danger of allowing any accumulation of water about the roots, of plants that drainage is so very important. In very bilious soils this contrivance is unnecessary; but in all those which are tenuous or which, from their low situation, do not permit superfluous water to filter away freely, such a precaution is indispensable. No person has ever seen good fruit produced by trees growing in lands imperfectly drained; and all experienced gardeners must frequently have been rendered careful by contrivances which are only valuable because of their efficiency in regulating the humidity of the soil. Mr. Hiver (*Gard. Mag.* v.

60) speaks of the utility of mixing ashes in great quantities with the soil, "as they prevent the translocation of water in very wet weather, and retain sufficient moisture for the purpose of the plant in dry seasons;" and when we hear of such precautions as are detailed in the following good account of preparing a vine border we only learn how important it is to provide effectually for the removal of superfluous water from around the roots, and how useless a waste of money is that which is expended in forming deep rich beds of earth.

"In preparing a vine border," says Mr. Griffin, of Woodhall, a successful grower of grapes, "one foot in depth of the mould from the surface is cleared out from the whole space; a main drain is then sunk parallel to the house, at the extremity of the border, one foot lower than the bottom of the border; into this, smaller drains are carried diagonally from the house across the border. The drains are filled with stone. The cross drains keep the whole bottom quite dry; but if the subsoil be gravel, chalk, or stone, they will not be necessary. The drainage being complete, the whole bottom is covered with brick, stone, or lime rubbish, about six inches thick, and on this is laid the compost for the vines." (*Hort. Trans.* iv. 140.)

The practice of placing large quantities of potsberds or broken tiles at the bottom of tubs, or pots or other vessels in which plants are rooted, is only another exemplification of the great necessity of attending to the due humidity of the soil, and the prevention of stagnant water collecting about the roots; and the injury committed by worms, upon the roots of plants in pots, is chiefly produced by the creatures reducing the earth to a plastic state, and dragging it among the potsberds so as to stop up the passage between them and destroy the drainage."

One of the means of guarding the earth against an access on the one hand, and a loss on the other, of too much water, is by paving the ground with tiles or stones; and the advantage of this method have been much insisted upon. But it is certain that, in cold summers at least, such a pavement prevents the soil from acquiring the necessary amount of bottom heat; and it is probable that, what with this effect, and the obstruction of a free communication between the atmosphere and the roots of a plant, the practice is disadvantageous rather than the reverse.

More commonly recourse is had to the operation of simple watering, for the purpose of maintaining the earth at a due state of humidity, and to render plants more vigorous than they otherwise would be; an indispensable operation in hot houses, but of less moment in the open air. It is indeed doubtful whether, in the latter case, it is not often more productive of disadvantage than of real service to plants. When plants are watered naturally, the whole air is saturated with humidity at the same time as the soil is penetrated by the rain; and in this case the aqueous particles mingled with the earth are very gradually introduced into the circulating system; for the moisture of the air presents a rapid perspiration. This operation is usually performed in hot dry weather, and must necessarily be very limited in its effects; it can have little or no influence upon the leaves, rapidly of their moisture so long as the latter is abundant; the roots are suddenly and violently excited, and after a short time the excess of cause is suddenly withdrawn by the momentary supply of water being cut off by evaporation and by filtration through the bibulous substances of which soil usually consists. Then again, the rapid evaporation from the soil in dry weather has the effect of lowering the temperature of the earth, and this has been before shown to be injurious (p. 113.) such a lowering, from such a cause, does not take place when plants are refreshed by showers, because at the time the dampness of the air prevents evaporation from the soil, just as it prevents perspiration from the leaves. Moreover, in stiff soils the draining of water upon the surface has but a little while the effect of "puddling" the ground, and rendering it impervious, so that the descent of water to the roots is impeded, whither it is communicated artificially or by the fall of rain.* It is, therefore, doubtful whether arti-

* Glazed flower-pots are totally unfit for most plants, except with the most careful attention to drainage, and even then they are much inferior to earthenware pots. The latter permit the excess of water to escape through their porous sides, which is impossible in the glazed pots; in which, if the aperture at the bottom become stopped, the earth is so saturated with water, the plant suffers, and soon perishes. A. J. D.

[No error is more common in this country than surface watering newly transplanted trees; and in our dry summers it is almost a universal practice. By pouring water daily

and watering of plants in the open air is advantage, unless in particular cases; and most advantage is done at all, it ought to be much more copious than is usual. It is chiefly in the case of annual crops at watering artificially is really important; and with them, if any means of occasionally deluging ground is devised, by means of sluices or otherwise, in the same way as we water meadows, it may be expected to be advantageous. Mildew, which is so often induced by a dry air acting upon a delicate surface vegetable tissue, is completely prevented in annuals very abundantly watered. The ravages of *Uromyces tritici effusus*, which attacks wheat; of *Uromyces fabae*, which attacks the bean; of *Uromyces fabae*, which attacks the bean; and the mildew of the pea, caused by the ravages of *Uromyces fabae*, may all be stopped, or prevented, by abundant watering in dry weather. Mr. Knight first applied this fact to the securing a late crop of peas for the table in the following manner:—

The ground is dug in the usual way, and the spaces which will be occupied by the future rows are well watered with water. The mould upon each side is collected, so as to form ridges seven or eight inches above the previous level of the ground, and each ridge is well watered; after which, the seeds are sown in single rows along the tops of the ridges. The plants very soon appear above the soil, and growth much more rapid, owing to the great depth of soil and abundant moisture. Water is given rather profusely once in every week or nine days, even if the weather proves showery; but, if the ground be thoroughly drenched by the autumnal rains, no further water is necessary. Under this mode of management, the plants will remain perfectly green and luxuriant till their blossoms and young seed vessels are destroyed by frost, and their produce will retain a proper flavor, which is always taken away by mildew.

The Flowers of Summer.

The following article was prepared by our friend R. ALEXANDER THOMPSON of Aurora, Cayuga Co. who has one of the neatest gardens in the country; it was received too late for insertion in our last number. We hope he will continue his contributions our columns.—Eps.

After the interesting monthly observations on Floriculture, given to the public in your columns, an notice may seem due for introducing to your notice a few

at the top of the ground, under a powerful sun and strong air, the surface becomes so hard that access of air to the roots is almost precluded; and the water rarely penetrates to the roots of the plants, while the superior machinery is supplying the thirsty roots with abundant moisture, is doing them an injury by the application of a very transient stimulus, which is followed by an increased sensibility to the drought. In late spring planting, it is always preferable to water abundantly in the hole, while planting the tree, before filling in the upper layer of soil. This will in most cases ensure the tree becoming sufficiently established by the union of new roots to support itself, and also serve to ensure its growth by filling up all the small hollows around a lesser hole. In seasons of continued drought, when it comes absolutely necessary to water flagging trees, two more inches of the surface soil should always be removed, the trees watered copiously, and the earth replaced before a surface dries. This will prevent evaporation and the soil will, in a short time, and the size of the tree will be retained for a much longer period.—A. J. D.]

“In the vicinity of Liegen (a town in Nassau) obtained from five perfect crops of grass are (annually) obtained on one meadow; and this is effected by covering the fields with river water, which is conducted over the meadow by numerous small canals. This is found to be of great advantage, that supposing a meadow not watered to three times in the year, then from the same meadow watered 4-5 times it produces 100 tons of hay. In regard to the cultivation of meadows, the country around Liegen is considered to be the best in all Germany.” Liebig, *Organ. Chem.* p. 165.—A. G.]

[The mildew which attacks the young fruit of the foreign grape, and is one of the most destructive of the most obnoxious to the cultivator in this country. An effectual remedy is the flowers of sulphur dusted over the bunches in a dredging-box (or the solution applied with a syringe.) but the grapes, if of the size of small pears, must be kept in the most certain prevention of this, as well as most diseases to which plants are subject, consists in keeping the vines in a dry and vigorous condition. The first crop or two of a young and thrifty vine is almost invariably fine and free from mildew; but every subsequent year (if the common mode of pruning is followed,) as the plant grows older, the fruit becomes smaller, and the leaves at last nothing but crumpled and mildewed bunches are seen. By leaving open half of the long shoots of each vine annually, thus forming new plants, and never allowing the same to bear more than two years, a full crop, free from mildew, may be obtained annually. Even the finer sorts, as the Isabella, are sometimes liable to mildew on old vines; when it occurs, they should be headed back, to bring up a supply of young wood, and plentifully manured. The young thrifty shoots will then have sufficient vigor to wither, and the attacks of mildew, to which the enfeebled fruit reduced by the old wood is so liable.—A. J. D.]

plants with whose phenomena you may already be familiar. But I trust the “lover of flowers” will never become weary with even a rehearsal of any thing relating to the successful culture or peculiarities in the structure of rare and beautiful plants.

Calandrinia grandiflora. Having for the first time proved successful in the culture of this interesting plant, for the encouragement of those who have met with like failures I am disposed to offer some observations on the probable cause of my success, the repetition of which, if followed by similar favourable results will introduce to the florist one of the most beautiful ornaments of the garden. Most plants of the genus *Calandrinia* are natives of California, and like many products of warmer regions than our own, this species shows itself ill qualified to endure the influence of our burning suns. So far as relates to the trial made by myself, the whole secret of success seems to have depended upon a rich soil, a sufficiency of moisture, and a shady situation; the first consisting of a compost formed of equal parts of well rotted manure, decomposed vegetable matter from the woods, and coarse sand. Under these circumstances, during the whole of the past month, while other plants were suffering or entirely destroyed by the excessive drought, a succession of these beautiful flowers excited the admiration of every beholder.

Verbena. The introduction into Floriculture of this unique and attractive genus of plants, is daily demonstrating that by this accession to the garden, is added one of its brightest gems. The facility with which new species may be produced from the seed, places in the power of every one, an opportunity for making choice collections, blending in their varied forms every variety of the most brilliant coloring. Few flowers require less pains for their successful treatment. Professor Russell remarks “that a hot sun, poor soil, and open air are the best means of cultivating them,”—three requisites which most gardens are capable of furnishing. Indeed, during the excessive drought of the past month, while most of the occupants of the parterre were struggling for existence, with a burning sun above, and the parched earth beneath, the *Verbena* daily exhibited its dense corymbs of brilliant flowers, in the bright sunshine, almost painfully dazzling to the eye.

DOUBLE FLOWERS. The appellation *monster*, by which botanists have been pleased to designate those flowers, which under peculiar circumstances of soil, cultivation &c. are disposed to undergo transmutations or conversions from one organ to another, and thus to assume new and varied forms,—in some instances would seem to be misapplied, for among flowers of this character we refer for many of the choicest specimens of Flora's kingdom.

From this indiscriminate appellation of the term, I have been the more disposed to dissent since observing a few mornings past a splendid specimen of the Double Tiger Flower (*Tigridia paeonia*.)

The characteristics of the original plant, so far as colour, form of petals, &c. were preserved. In other respects every organ of the flower was double, the twelve expanded petals arranged systematically as in the single plant, and presenting a beautiful star shaped flower of almost unequalled magnificence.

I am not aware that this tendency to the multiplication of organs is frequent in plants of this genus. On the contrary, I am inclined to think that the occurrence is very rare, though not an unimportant event in the ARTIFICIAL CLASS to which plants of this genus belong.

WOOL IN MICHIGAN.—In conversing, this morning, with a friend from Tecumseh, Mich., engaged in the manufacture of Cloth, we were informed that the Wool-growing business is more extensive, in that

state, this year, than in former seasons. He says the location and character of Michigan is peculiarly well adapted to successful engagement in that business; and thinks that Wool will soon be a leading and important article of export from that fertile and beautiful state. Wheat-growing and sheep-raising work admirably well on the same premises.

We have noticed, in reporting the lake trade, that some fair quantities of wool have been shipped down the lake from the Peninsula state. May her prosperity be commensurate with her industry and economy; and let all be proportioned to her natural advantages and soon no state may say “come ahead.”—*Rochester Evening Post.*

Planting Orchards—Peddling Fruit Trees.

The great demand which has existed for fruit trees in newly settled parts of the country, has given rise to a system of imposition, in the shape of peddling, which demands exposure; for it results in loss and disappointment to thousands of unsuspecting persons, who purchase trees in this manner, hoping to improve their premises.

In the spring of the year, particularly, enormous leads of fruit trees may often be seen passing through the country, on a tour of two or three weeks, without even the slightest provision being made to preserve their vitality—tied up like so many bundles of brushwood, their roots exposed to the full action of the sun, winds, or frosts, as though they were completely imperishable; whereas a few hours exposure is often enough to destroy all the fibrous roots, so essential to the life and growth of the tree. It is indeed surprising that any man of ordinary intelligence, especially any cultivator of the soil, should be so ignorant of the first principles of vegetable physiology, as to expect trees thus treated, or rather maltreated, to live and thrive.

But a few days ago we were conversing on the subject of planting trees, with a gentleman from Canada, where this peddling system is practised considerably; he said that he and many of his neighbors had planted apple orchards year after year, but with very little success—not more than one third of the trees lived, and they might as well have died, for all the progress they have made. We asked him how he procured his trees; he replied, from a man who was peddling them. This at once explained the cause of his ill success. Partial failures frequently occur from unskillful planting and other adverse circumstances, but in the case we have related, and all similar cases, the trees were in fact dead before they were planted.

The man who digs up trees and sends them about the country in this manner, palming them off upon the community in a ruined condition, is guilty of a wilful violation of the laws of common honesty and fair dealing, and should be regarded as little better than a pickpocket.

But there is an argument of a pecuniary character in favor of purchasing from these peddlars:—they usually sell their trees at a lower price than regular nurserymen. Enough has been said to show the fallacy of this economy. But it may be asked why can these peddlars sell lower than regular nurserymen? Because their trees are raised in a cheap and careless manner, without proper regard being paid to the kind or quality of the fruit; cultivating those kinds which come easiest to handle and produce the most rapid growth of wood; while in nurseries where there is a reputation at stake, and responsibility is assumed, the reverse of this is the practice, and in consequence of the extra expense incurred in keeping all correct, and in procuring new and valuable varieties from a great distance, the prices must be somewhat higher.

We may hereafter have occasion to expose the misconduct of some professed regular nurserymen; but, one thing at a time, is our motto. O. P. Q.



ROCHESTER, OCTOBER, 1841.

Agricultural Exhibitions.

This is the month of the Farmers' Holidays—the month in which the producers—the true nobility of our land, will meet together for mutual pleasure and improvement. On these occasions the best productions of the soil, the finest animals, the most approved implements, and the most skillful ploughing may be seen by all. No farmer can witness these exhibitions without learning something by which he can improve in his practice of husbandry. Let all therefore, attend—and let all feel it to be their duty to do something to give interest to the occasion. And here we perceive there is apt to be misapprehension in the minds of many. They appear to think that any article to be fit for exhibition must be of *great size*. But this is the principal thing to be regarded, by committees at our Fairs? 1. the largest calf, the largest hog, or the largest cabbage invariably the best? By no means. On the contrary those of ordinary size are more frequently the most perfect in form or in quality. Let the committees remember this; and let farmers who have fine animals or productions, bring them forward.

The drama in this State has opened with a grand *Mass Meeting* at Syracuse. We hope the thousands of farmers who were there will impart the right spirit to their friends and neighbors; and that all will unite to give life and interest to the county exhibitions. The whole country—especially the *Empire State* is now *teeming up* on this subject, and we believe the results will be such as will convince every one of the usefulness of agricultural societies and of the wise policy of our Legislature in granting them encouragement.

The officers and town committees of the county societies should consider that the efficiency and usefulness of the society mainly depends upon them. The exhibitions are now close at hand and vigorous efforts should be made to obtain members and funds, and persuade farmers to bring their animals and productions to the Fairs.

We regret that more perfect information respecting the societies in this State and elsewhere, has not been furnished us. We are proud of Western New-York, however—our *Genesee Country* has organized nobly; and we are sure the exhibitions will do her farmers honor.

The following is a list of the places and time of holding the Fairs in the counties from which we have definite information:

Ontario County,	at Canandaigua, Oct. 12th.
Genesee “	“ Alexander, Oct. 13th and 14th.
Monroe “	“ Rochester, Oct. 15th and 16th.
Livingston “	“ Genesee, Oct. 22d.
Orleans “	“ Albion, Oct. 14th.
Niagara “	“ Lockport, Oct. 22d.
Erie “	“ Buffalo, Oct. 6th.
Chautauque “	“ Mayville, Oct. 5th and 6th.
Wayne “	“ Newark, Oct. 16th.
Cayuga “	“ Auburn, Oct. 13th and 14th.
Oswego “	“ Oswego, Oct. 6th.
Oneida “	“ ———, Oct. 20th.
Warren “	“ Ballstown, Oct. 5th.
Portage, (O.) Ravenna, Oct. 20th and 21st.	
Darham, (Canada) Millville, Oct. 19th.	
Northumberland, Carleton, Grafton, Oct. 20th.	

Books and Papers as Premiums.

We are glad to perceive that several Societies propose to award agricultural books and papers, instead of money, for the smaller class of premiums. We believe it will in general be quite as satisfactory and much more beneficial to the recipients. The Genesee county Society offers more than sixty copies of the New Genesee Farmer, together with other papers and books, in their list of premiums for their approaching Fair. We appreciate the compliment, Gentlemen Managers, and tender you our thanks.

Our acknowledgments are also due to the officers of the Niagara District Agricultural Society in Canada, for an order lately received for sixty copies. The Treasurer informs us that great good has been seen to result from the circulation of our paper among the members of that Society—Thus it will always be.

New Agricultural Papers.

We find on our table quite a number of new ‘Exchanges’ seeking our acquaintance, some of which we have long neglected. Almost every day affords us new and gratifying evidence of the increasing demand for agricultural reading; and convinces us that the time is fast approaching when no intelligent farmer in our land will consent to be without at least one paper devoted to his profession.

“*The Canadian Farmer and Mechanic*” is the title of a paper commenced at Kingston, August 16, 1841, by Garfield & Good, proprietors, A. B. E. F. Garfield, Editor; 16 pages monthly, \$1 per annum; (rather smaller than this paper.) A well conducted and a well circulated agricultural paper in Canada, would doubtless exert a very beneficial influence on the prosperity of the province, and we wish this experiment success; at the same time, from our knowledge of the field and experience in the business, we apprehend neighbor Garfield will find he has undertaken an enterprise of greater difficulty than he imagined.

Another *Agricultural paper in Boston!* S. W. COLY, formerly editor of the Yankee Farmer, has left that paper, and commenced a new one entitled the “*Farmer's Journal*,” a monthly sheet, (half the size of this) price 50 cents a year. There are besides this, three weekly agricultural papers and one monthly horticultural, all apparently well sustained. Verily New England agriculturists are a reading people, and not afraid of “book farming.”

“*The Kentucky Cultivator*” was commenced last winter, but stopped for the want of—subscribers. It has now recommenced and promises to continue—well done Mr. Virden. It is a neat little monthly of 16 pages; \$1 per year.

“*The Plough Boy*,” is the title of a small semi-monthly sheet, published by Wm. F. Duriso, Edgefield Court House South Carolina, \$1 50 per year.

“*The Union Agriculturist*,” Chicago, Illinois. After a suspension of several months, arising from a difficulty with the printers, this valuable paper has again made its appearance—success to it.

“*The Western Farmer's and Gardener's Almanac for 1842*”—By Thomas Agler, Editor of the *Western Farmer and Gardener*, Published by E. Lucas, Cincinnati.

A copy of the above work has been politely forwarded by the author, and we have examined it with great satisfaction. It is a very neat duodecimo pamphlet of ninety-six pages, and contains, besides the usual calendar, &c., a large amount of very useful and interesting matter relating to agriculture, horticulture and rural affairs, with numerous spirited engravings by Mr. Forster. The chapter on Swine (with 15 portraits) is alone worth double the price of the work. Every farmer and gardener who has an op-

portunity, should procure this almanac: we presume it may be obtained at most of the booksellers in the west, and we all advise the publisher to send some this way. The price is \$2 per dozen, or 25 cents single. It can be sent by mail if desired—the postage is six cents for less than 100 miles, and ten cents for any distance over 100 miles.

The following glance at the contents will give an idea of the variety and interest of the work:

Times of holding Courts in Ohio, Kentucky, Tennessee, Indiana and Illinois. Rates of postage, list of Agricultural periodicals. January—Life in the country, the garden, resuscitating old orchards, saving clover seed, the bee, farm buildings. February—Sugar making, culture of corn, farm buildings. March—Duck shooting, the farmer's garden, farm stock. April—The rising, potatoes, the fruit garden and orchard, grafting, building, causes of decay in peach trees, manure. May—The flower garden. June—The Poultry yard. July—Fourth of July frolic, pickling, cure for murrain, vermin in cattle. August—Emigration to the west, turnips, removing weeds and briars, singeing corn, hoven cattle. September—The vintage, October—Cider making, the peach tree worm. November—A chapter on hogs. December—Wolf hunting on the ice, sowing grass seeds. Engraving—Sleighing party, subtleties heaven, sugar camp, duck shooting in the prairie swamps, building log houses, grafting, budding, young gardeners, the poultry yard, picnic party in the woods, party of immigrants, the vintage, cider making, peach tree insect, hog killing, white Chinn log, Warren Co. do., Woburn do., White Berkshire do., Doctor Martin's banter pigs, and Berkshire barrow, “Tom,” do., “Daniel Lambert,” Berkshire sow, “Madam,” Saratoga boar, Irish grazer sow, do. boar, belt barrow, Neapolitan boar, thin-rined sow, wolf hunting on the ice, and eleven amusing tail pieces.

P. S. Since writing the above, we have received from the publisher an invoice of the Almanacs and “Bee-breeding in the West.” So that both of these works will soon be for sale at the Bookstores and Seed Store in this city, at \$2 per dozen, or 25 cents each—orders are solicited.

Our Friends in Canada.

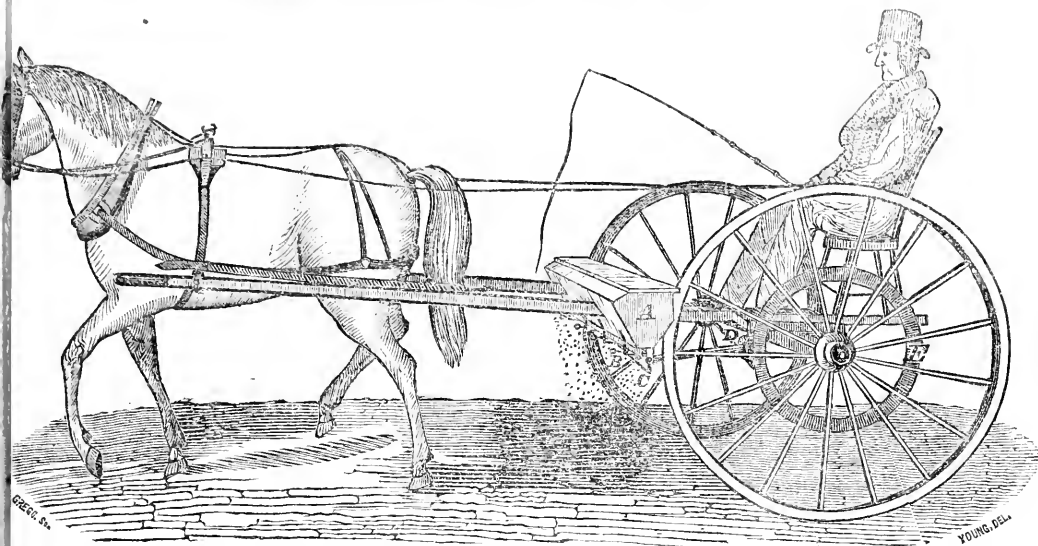
The hearty welcome and genuine old-country hospitality which we usually meet with among the English and Scotch farmers in Canada, always makes us regret that our visits in that country cannot be longer and more frequent. While on a hasty tour in that province last month, we called at a pleasant cottage fronting the lake and surrounded by a beautiful garden, occupied by two English friends, one a bachelor, and the other with a better-half from one of the best dairy districts in England. We had, on one or two former occasions been struck with the peculiar excellence and great variety of the table luxuries produced from her dairy. Two of these, “Junket” and “Clotted Cream,” are rarely met with in this country, although with some of us they may be associated with the happiest recollections of our childhood. At our request, our friend furnished us directions for preparing these dishes, which we give our readers.

TO PREPARE JUNKET.

Take one quart of milk warm from the cow, and stir in a teaspoonful of rennet, and let it stand till curdled, which, if the rennet is of proper strength will be in about fifteen minutes; grate over it a little nutmeg, and sweeten with maple molasses or honey. It is an excellent dish for supper.

SCALDED, OR CLOTTED CREAM.

Take a pan of perfectly sweet milk, twelve hours old, with the cream on; stand it on a stove or furnace over a gentle fire till slightly scalded, “when a ring will appear in the cream of the size of the bottom of the pan”; then take it off and let stand till cold; skim off the cream and it is fit for use. When used as an accompaniment with fruit, tarts, &c., it is sweetened to suit the taste. This cream is esteemed a great luxury in London. It is brought in by dairymen and sold at a high price.



HATCH'S SOWING MACHINE.

are happy in being able at length to give our readers a correct representation of Hatch's Sowing Machine—an invention which we firmly believe will prove of more benefit to the farming community than any other that has appeared of late years. The above drawing is so perfect that but little description is necessary. The machine consists of a pair of wheels of the size of ordinary carriage wheels; an axle 10 feet long, with a pair of shafts for the horse to draw by. Just in front of the wheels, and across the shafts is the hopper (A), which is long and capable of holding 3 or 4 bushels of grain. At the bottom of the hopper is a slide or agitator 1 inch square, faced with iron and having teeth on its sides, by the motion of which the grain is shaken out. The width of the hopper, and the consequent discharge of the seed, can be increased or diminished by means of set screws, as shown at B. When the machine is in operation a rapid rotary motion is given to the agitator by means of a small rod and crank (C) which is attached to one end of a small shaft 15 inches long, on the other end of which is a wheel (D), with cogs or teeth meshing into the master wheel E. The master wheel is bolted on to the inside of the spokes of the high wheel of the machine. It is 2 feet in diameter, and one revolution of it gives eight revolutions to the sowing wheel and shaft. On the top of the back part of the machine is a seat for the driver. A small cog is attached to the end of the pinion shaft, and reaches the seat of the driver, by means of which he can readily put the machine out of gear, so as to stop the discharge of seed at any time when desired. The machine will sow all kinds of grain, grass seed and plaster, at any desired rate from one to many bushels per acre. It is easily managed, and not liable to get out of order. A man or a smart boy with a horse, can sow from twenty to twenty-five acres with it in a day.

The inventor and proprietor of this machine has spent several years in testing and proving it, and he now introduces it to the public with the utmost assurance that it will fully meet the wants and expectations of the community. It is well

known that sowing is one of the most difficult and laborious operations of the farmer, and one which but few men can perform properly. Hence arises the need of a machine like this—one that will perform the work correctly, expeditiously, and with ease. All who have used this machine, agree in declaring that it answers the purpose exactly; and if we are not mistaken, it will in a few years be as uncommon to see a farmer sowing grain by hand in this country, as it now is to see one thrashing with a flail.

Mr. HATCH has lately been engaged in manufacturing a few machines in this city, in order to introduce them to the farmers of Western New York, but he cannot, nor does he wish to supply all orders, as his main object is to sell rights for others to manufacture. The price of the machine is \$50. He is willing to send two or three to Ohio and other Western States, if desired, in order to make them known there; and he hopes that all who feel an interest in the subject will examine them and satisfy themselves, before purchasing rights. To enterprising mechanics and others, he will sell County or State rights, on favorable terms. Letters addressed (post paid,) to JELIUS HATCH, Rochester, will receive attention.

Aware of the deception which is often practiced by means of Certificates and Recommendations, and being determined that this Machine shall recommend itself, the proprietor begs to refer those wishing information respecting it, to the following highly respectable individuals who possess them:

RAWSON HARMON, Jr., Wheatland,	MARVIN SMITH, Mendon,
SYLVESTER HARMON, " "	JOHN MOXON, Greece,
ELISHA HARTON, " "	ASA ROWE, " "
H. & D. ROGERS, " "	HENRY FELLOWS, Penfield,
ISAAC COX, " "	ALVA S. HOYT, Batavia,
THOMAS H. NEWBOLD, Caledonia,	CHESTER SCOTT, Elba.
ISAAC LUCEY, Chili,	

DYEING.

FARMERS.—The following recipes are invaluable to house keepers, and should be preserved by every wife. The madder compound, indigo compound, and compound, or for sale only by the subscriber, at the Street Drug Store, where are also for sale every description of dye woods and stuffs, at the very lowest cash prices.

Color Madder Red.—Take one pound of Madder (or even two) pounds of yarn or cloth, soak the madder in a brass or iron kettle, one night in warm water, enough to cover it; then wash it out, next morning put in two ounces of the compound for every pound of madder with which you soaked. Then wet your yarn or cloth and wring it out in the water, afterwards put in the dye. Now place the kettle over the fire, and bring it slowly to a scolding heat, it will take about half an hour; keep it at this heat half an hour, if a light red is wanted, and longer if a dark one; or, depending upon the time it remains in the dye.

When the color is made, rinse the cloth immediately in water, and it will then be finished.

Color Scarlet Red.—Take soft water, sufficient to cover the yarn or yarn you wish to color; bring it to a boiling heat in a copper or brass kettle; then add 1 lb. of cream of tartar, and for every pound of cloth, now boil a minute or two, and add two oz. of powdered Lac, and 3 oz. of Madder ground, (the Lac and compound must be previously mixed in water or earthen bowl,) boil five minutes; now wet the yarn in warm water, and wring it, and put it in the dye; boil it nearly an hour, take the cloth or yarn out, and wring it in clear cold water.

Color Green.—For every pound of yarn or cloth, add 1 1/2 lb. of omeles of alum and 1 pound of Fustic. Keep it at a scolding heat, but not boil; soak the cloth until it acquires a yellow color, then throw out the clips and add the

Indigo compound slowly, until you have the desired shade of green.

To color Pink.—For every three pounds of yarn or cloth, in Squirts of water, (or enough to cover it,) use one pint of the Pink compound. Bring the water containing the cloth nearly to a scolding heat, and add the compound until the shade suits you.

M. B. EDSON,
State Street Drug Store, 30 State st., next door to the City Bank, Rochester.

"The Stump Extractor."

Mr. Drake, the owner of the right of this machine informs us that the patent has nearly expired, but he is in hopes of getting it renewed.

Madison Co. Agricultural Society, Organized September 1, 1844.

JOHNATHAN D. LEMARSH, President.
ELIJAH MORSE, HONORARY G. WARDEN, JAMES H. DUNBAR, Vice Presidents.
ALEXANDER KRUMHOLTZ, Cor. Sec'y.
A. S. SLOAN, Recording Secretary.
URIAH LELAND, Treasurer.

Johnathan Woodward, Cazenovia; Thomas A. Clark, Sullivan; Stephen Comen, Eaton; Geo. B. Rowe, Lenox; Orrin B. Lord, Hamilton; James Coldridge, Madison, Geo. Kitch, Nelson; R. B. Stewart, Smithfield; Stockbridge; D. R. Wyter, Lebanon; Brookfield; Fenner, Georgetown, were chosen Managers.

Orleans County Agricultural Society.

We have received a circular containing the constitution of this Society, and the list of premiums to be awarded at the Fair to be held at Albion on the 14th day of October. We have not seen the list of officers. CHARLES LEE, is President, and H. CHASE Sec'y.

Mechanics Fair at Rochester.

The third annual Fair of the Mechanics and Artisans of Western New York will be held at Rochester commencing on the 12th day of October. We have not room to insert the Circular this month, and we believe no arguments are necessary to induce the thousands to attend who witnessed the previous exhibitions.

Wild Rice—Inquiry Again.

We should be glad if some one of our friends in Canada would give us some particular information respecting the Wild Rice,—whether it is ever sown or cultivated in any way; what depth of water it usually grows in; what quantity of grain it will yield per acre; how it is harvested and cleaned, &c., &c.

The Most Valuable Breeds of Sheep

Wool Growing is becoming a very important and profitable branch of agriculture in this State, and many farmers are anxious to inform themselves respecting the character and relative value of the different breeds of sheep. The following article, copied from the *Western Farmer & Gardener*, is the best we have seen on this subject of late. We would advise our readers, who wish information respecting this or any other kind of farm stock, to attend as many *Agricultural Fairs* as they can, where they may see the different breeds, and compare them. We will give some engraving representations hereafter.

In my former communication, I endeavored to lay before your readers some account of the particular application of the different sorts of wool, to their manufacturing purposes; distinguishing them by their well known division of *long and short*. In continuing the subject, I purpose taking a short review of the various breeds of sheep, or such of them as I think will be interesting to your readers; explaining with as much distinctness as lays in my power, the origin of the name held at present by each particular breed; having in view the intent of informing those who may not be acquainted with the subject, what is meant by the Cotswold, Bakewell, &c.

The long-wooled sheep shall first occupy our attention; and, as they are more especially before the public mind, we will begin with the Leicestershire.

The Old Leicester, the New Leicester, the Bakewell, and the Dishley, are one and the same breed of sheep; the Old Leicester being the original stock. About the middle of the last century, Mr. Bakewell, who lived at Dishley, in Leicestershire, endeavored to improve the existing sheep of that county; which he did by attention and a careful selection from all the flocks around his neighborhood, without regard to size, but having in view the greatest propensity to fatten, with that shape which he considered would produce the largest proportion of valuable meat, with the smallest quantity of bone and skin.

Having bought his stock from sheep so selected, he carefully attended to the peculiarities of the individuals from which he bred, and (from the best information) did not object to breeding from near relations, when by doing so he put together animals likely to produce a progeny possessing the characteristics he wished to obtain.

Some persons supposed that Mr. Bakewell formed the New Leicester variety by crossing different sorts of sheep. There is no reason for believing this; and the contrary appears to be the fact. He next established a system of letting rams for the season, instead of selling them, to those who wished their use—a system not only beneficial to the ram-breeder, but also to the farmer. It enabled the ram-breeder to keep a greater number and give his whole attention to this department; and it seemed to the farmer, any cross he may require for any portion of his flock, without the necessity of in-and-in breeding.

Valuable as this system no doubt was, it was only after 29 years of incessant perseverance, that Mr. Bakewell had the pleasure of seeing his ideas on this subject sustained by the breebers of the country. The first ram Mr. B. let, was for sixteen shillings. Twenty-six years from that time, he let a celebrated ram called the *Two Pounder*, for one season, at four hundred guineas each from two breeders, still reserving one-third for himself; the value of the ram for this season, being thus estimated at twelve hundred guineas, (about six thousand dollars.) Mr. Bakewell's improved breed were called the New Leicester, to distinguish them from the parent stock; by some they were designated as the Bakewell, and by others the Dishley, being the place of his abode; and thus we get at the origin of all these names.

Before closing this account it may be well to describe the peculiarities of the New Leicester breed of sheep. The head should be hornless, long, small, tapering towards the muzzle, and projecting horizontally forwards; the eyes prominent but with a quiet expression; the ears thin, rather long, and directed backwards; the neck full and broad at its base, where it proceeds from the chest, but gradually tapering towards the head, and particularly fine at the junction of the head and neck; the neck seeming to project straight from the chest, so that there is, with the slightest possible deviation, one continued horizontal line from the rump to the poll; the breast broad and full; the shoulders also broad and round, and no uneven or angular formation where the shoulders join either the neck or the back; particularly no rising of

the withers; or hollow behind the shoulder of these bones; the arm fleshy through its whole extent, and even down to the knee; the bones of the legs small, standing wide apart, no looseness of skin about them, and comparatively round; the ribs forming a considerable arch from the spine, so as in some cases, and especially when the animal is in good condition, to make the apparent width of the chest even greater than the depth; the barrel well ribbed home; no irregularity of line on the back or belly, but on the sides the carcass very gradually diminishing in width towards the rump; the quarters long and full, and, as with the forelegs, the muscles extending down to the hock; the thighs also wide and full; the legs of a moderate length; the pelt also moderately thin, but soft and elastic, and covered with a good quantity of white wool, not so long as in some breeds, but considerably finer.

The New Leicesters are not however, without their faults; they are by no means prolific breeders. This, it is probable, may be the result of the in-and-in breeding to which Mr. Bakewell no doubt sometimes resorted. They vary much in size, weighing at a year and a half old from twenty-four to thirty six pounds per quarter; though we have instances of their being fed to a considerably greater weight. We have it on record that Mr. Morgan of Loughton, fed a pure bred New Leicester sheep, the live weight of which was three hundred and sixty-eight pounds, and that of the carcass two hundred and forty-eight.

The fibre of the wool varies from five to more than twelve inches in length, and the fleece averages from six to seven pounds; it is used mostly in the manufacture of serges and carpets.

The Cotswold sheep takes its name from a range of hills on which they are raised in Gloucestershire, and known as the Cotswold hills—being one of the grand divisions of that country. Camden says "that they derive it from the cots or sheds in which they were housed at night,—or permanently for the winter; and the wolds or open high grounds on which they were pastured in the summer." Every person at all conversant with the topography of England knows that the Cotswold hills have ever been famous for the pasturage afforded to this particular breed of sheep. In 1447, Don Duarte, King of Portugal, made application to Henry IV. King of England, for liberty to export sixty sacks of Cotswold wool, that he might manufacture certain cloths of gold at Florence, for his own use. Shove says in his Chronicle, that in the year 1467, Edward IV. gave license to pass over into Spain, certain Cotswold sheep, &c.—The object that I have in making these quotations, is merely to show the antiquity of the breed. Very few pure Cotswolds now exist, and these we are given to understand, are fast passing away. The description given of the pure Cotswold is that they are taller and longer than the improved breed; comparatively fat sided; deficient in the fore quarter but full in the hind one; not intending so early, but yielding a longer and a heavier fleece.

The Cotswold have been crossed considerably by the Leicester, and the prevalent breed may be said to consist of half Leicester, half Cotswold. Though a distinct breed of sheep, the similarity that presents itself in the Bakewell and Cotswold sheep of this country, would carry conviction to the mind of any breeder, that the cross has been carried to a very considerable extent, upon most, if not all of the sheep of this name imported into America. In some parts of this country—for instance, in the territory of Iowa, or any other, where wool is the object, and the pure Cotswold is the better sheep; they are more easily kept; are larger, though not so well formed in the body, and produce a heavier fleece. This is speaking comparatively between the Cotswold and the Leicester.

The improved Cotswold, which is the sheep we have here, will weigh from 25 to 40 lbs. per quarter; and yield a fleece of from 7 to 8 pounds on the average.

The pure Lincolnshire sheep, like the pure Cotswold, is fast disappearing. Cutley describes them as having no horns; white faces, long, thin, and weak carcasses; the ewes weighing from 14 to 20 lbs. per quarter, and the wethers from 20 to 30 lbs.; with the long, white, fine, large bones; thick pelts, and long wool, from ten to eighteen inches, and weighing from 5 to 14 lbs. per fleece. According to Ellis, they were the longest legged and largest carcassed sheep of all others; and although their legs and bellies were for the most part void of wool—yet they carried more wool on them than any other sheep whatsoever. The contest for supremacy between the

Lincolnshire and the Leicester was long and tremendous, and it still even now exists in the minds of some, with regard to the relative value of the respective breeds. The cross of the Leicestershire ram on the Lincoln ewe, displayed to a great extent the excellencies of the male parent, and the wether attained its maturity in a year less time than it was accustomed to, with less comparative expense of food even in that time. The Lincolnshire sheep now, is for the most part crossed with the Leicester—as indeed is the case with most of the long wooled varieties. The average weight of the fleece of the present sheep, is about 7 lbs., and the pure Lincoln, not more than 9 lbs.—the length of the staple from 8 to 9 inches.

There are other long wool sheep, but from the cross of the Leicester, they have generally inherited so much of the characteristics of that breed that I think it unnecessary to give any lengthened description of them.

In a future number I will make a review of the short wool sheep, and give my opinion as to the adaptation of the particular breed to western farming purposes.

Yours, &c.

UMBRA.

American Wool Product.

To those who have paid the subject but little attention, the amount of money invested in the production of wool within the United States, will seem surprising. It is very generally believed that this is quite a secondary branch of our general interest, instead of one of the most fruitful sources of our wealth, an best deserving the cherishing protection of our Government. As shown by the returns of the last census we have in this country, exclusive of North Carolina, Michigan and Kentucky, 19,055,962 sheep; and taking ten dollars as the average value of land necessary to sustain a sheep and make a fair allowance for the animals themselves, for the labor necessary for their proper superintendence with that required to prepare their product for its first market, which are as much part of the investment as the land which sustains them, the aggregate amount of capital invested in this branch of industry will be at least two hundred millions of dollars. This is certainly a immense sum and well deserves the attention of the General Government. At present, England supplies us annually with some ten millions worth of broadcloths, and after all chooses to import her wool from the continent to the entire exclusion of our own. In 1839, her entire import of this article was \$7,385,944 pounds, and while we had some 40,000,000 pounds of wool remaining at home, nearly two-fifths of the whole wool manufactures of Great Britain came to the U. S. And yet we have only \$15,000,000 invested in wool manufactures.

Of the aggregate amount of wool grown in the United States in 1839, New York produced 4,012,141 pounds; Ohio, 3,650,970; Vermont, 2,457,753; which, in proportion to her population, is more the largest amount grown in any State: Pennsylvania 3,076,783; Virginia, 2,678,044; Maine, 1,475,551; New Hampshire, 1,360,088; Indiana, 1,302,399; Massachusetts, 1,055,591; Tennessee, 1,629,516; and the other States various amounts between 183,675 pounds of Connecticut, and the 45,524 of Louisiana.—*N. Y. Tribune.*

Culture of the Tare or Vetch.

A subscriber in Canada inquires whether any farmers in this region are in the practice of growing English Tares; and if so with what success. We should be pleased if some of our readers would give us the results of their experience on this subject. In the meantime, the following, from the *Farmer's Cabinet*, may be useful:

"At a late meeting of the Philadelphia Agricultural Society, a member inquired if any one present could speak experimentally on the culture and value of the tare or vetch, which is in such very general use in England, where the summer-sowing system is adopted; remarking, that from all accounts the plant must be astonishingly productive as well as nutritious. Having myself employed it for that purpose very largely, and for many years, I would say, its productive powers have never yet been overrated, or its value underrated, as food for all kinds of cattle. Horses, milk cows, fattening beasts, sheep and hogs, will grow fat while feeding on it, and the older it grows the more valuable it becomes, as the seed when formed in the pod, is far superior to oats or any other grain for the purpose of cattle feed: the seeds are black, and the size of very small peas. The crop is used for sowing, by cutting while green and taking it to the st

it is sometimes led off by sleep, coming then out by means of temporary fencing or hurdles, care not liable to become hoven while feeding it in a stage of its growth; on good land it has been known to reach the height of three feet and even more, producing as much as 12 tons of green food per acre, which, when well dried, will yield 3 tons the most valuable hay on the farm. The first sowing takes place as soon after harvest as possible in England, upon land designed for the wheat crop, the next autumn, with the winter variety of seed, which is easily distinguished from the summer tares, as is smaller, rounder, and blacker; these will bear severity of the winter; rye is often mixed, to enable the crop to stand up, when it attains a considerable height, but a sprinkling of wheat has been found to be for this purpose, as it remains longer succulent in the summer. The crop from this sowing will be fit for cutting for soiling in May, and the stalks if cut in the ground, will afford a second growth for the next year; but as the tares is a fallow crop, it is the management to cut all off and plough the land up as soon as the crop is removed, well working it during the summer, preparatory to re-sowing, early in the autumn, after a dressing well-prepared compost, if this has not been given to the tares—a far better arrangement for both crops. The next sowing is with the summer variety of the seed, as early in March as the season will admit, on land that has been ploughed preparatory in the autumn or winter; again in April another crop is sown, if necessary, two other sowings might be made, the last so late as the end of June, that so a succession of the most valuable crop might be secured for the winter of the summer, and until the end of September. Such crops produce immense quantities of manure, which is carried from the sheds and applied for dressing others; turneps, for instance, which may be sown on the land from which the first crop of tares has been carried, and fell off in time for re-sowing in the autumn. It must not be forgotten, that the richer the land, the greater will be the crop of tares, and none will pay so amply for manure: when the crop is very heavy, there is less chance of obtaining good seed, and if that be the object, it is recommended to mow the first crop early for soiling, to permit the second growth to stand for seed, which is sometimes a precarious business, nothing being more uncertain. I have purchased seed at a guinea a bushel, and sold the next year's produce (taken from it at six shillings a bushel). When the seed is moderate, the quantity sown is two shovels or two and a half per acre, but whatever the seed may be, it will be repaid in the crop, if the land is good heart. As much as 30 bushels of seed per acre has been obtained, but 15 bushels, and often half as, is more common. Under a heavy crop of tares, a land will be found perfectly clean and mellow, and will turn up like an ash-heap; and there is no objection with me, that the crop may be raised with ease in this country, if well cultivated on good soil, rather stiff in its nature and lying cool.

With regard to the value of the tare for soiling, it has been calculated that ten times the stock might be put on them than on any other commonly cultivated crop; horses require no corn or any other food, and give more butter while feeding on them than on any other food whatever. Is it not strange that no agricultural experiment on an extensive scale has yet been made on such an invaluable crop in this country?"

Hussey's Reaping Machine.

In our July number we mentioned that one of these machines had arrived in this city, and that the farmers in this vicinity would have an opportunity of witnessing its operation. But, unfortunately, the proprietor did not arrive till after the 1st of August, when nearly all the wheat was cut, and a good field for the purpose could not be found. A trial was, however, made on the farm of Mr. Whitney near this city, and witnessed by a number of farmers and citizens. The ground was very unfit for the purpose, being quite rough, and containing numerous stumps, so that the machine was exhibited under great disadvantages. Still it did good execution, and convinced all who were present that on ordinarily smooth land it would prove a great saving of time and labor in harvesting grain. It cuts remarkably clean—in fact not a straw that stands in its way can escape; and, from what was shown of it here, there was no reason

to doubt that under favorable circumstances it would cut fifteen acres in a day.

We regret that a more public and extensive trial could not be made here the present season; but hope that many of our readers will have an opportunity of witnessing its performance next year. In the meantime we copy from the Farmers' Register some account of its operations in Virginia. After speaking of an experiment made on very unfavorable ground, William B. Harrison, of Brandon, says:

"The third day, however, we removed them to a more favorable site, where the beds were wide, the furrows shallow, and the wheat heavy, and I very soon became convinced that Mr. Hussey's reaper did not deserve to be classed with the lumbering of the day. By this time the horses and hands employed had become better trained, and the work was beautifully done—better indeed than I ever saw done by the most expert cradler and binder. 'So with every appliance and means to hasten it, to enable them to do the work well. Less wheat was left on the ground traversed by the machines, either standing or cut, than I ever observed in any wheat field before.

"I wish I could speak so strongly in favour of the reaper as a time-saving machine, but the truth obliges me to say that I cannot. Still I think that it will save time; but the question is, how much? A very difficult question it is, too, and by no means so easily solved as might at the first glance be imagined. Indeed, so much depends on the locality, the length of the rows and the heaviness of the crop, (the reaper operating to most advantage in heavy wheat,) that the time saved is constantly varying; and to approximate the truth, therefore, is as much as can be expected. Something, indeed, a good deal, depends upon the fact, whether, in order to run the machine; good policy, however, would always suggest the propriety of stopping the work."

"It is not enough to ascertain the number of binders required to run the machine, in order to determine the time saved. Say eight hands are required for this purpose in heavy wheat, and where the rows are pretty long, and such situations are the most favorable to the reaper, and six where the wheat is lightest and the rows short, and a good deal of time consequently lost in turning. Are six cradlers saved in the former case, and four in the latter, estimating the driver and raker, who ought to be good and efficient hands, as of equal value with cradlers? Certainly not; and for this reason. The reaper cannot be started so long as there is any dew on the wheat in the morning, nor can it operate after much has fallen in the evening. At such times the hands that attend the machine have to be employed in some other way; and moving from one kind of work to another is always attended with more or less loss of time. Nor is this all. In shocking wheat after the machine, some loss of time is also incurred. Where we use tie cradles, the binders follow immediately behind them, and then come the pickers up as well as the shockers, and the whole work goes on together. The reaper, however, when operating in long rows, as it must do to work to advantage, scatters the work so much, leaving it in long narrow strings, that shockers cannot find constant employment in following it. We have found it necessary, therefore, to stop a part of our cradles, once a day, in order to bring up the shocking after the machines, which certainly occasions some loss of time. Still I think on the whole that the securing of our crop has been somewhat expedited by the use of these machines; and if binders could have been hired to operate them without stopping the cradles for the purpose, our harvest would have been very materially shortened; and the loss of wheat would unquestionably have been much less."

"It would add greatly to the value of these machines, if the ingenious inventor, Mr. Hussey, could devise some way to use them out damp straw; so that they might be kept at work all day. Whatever Mr. Hussey has not accomplished, however, is, I am sure, owing to the intrinsic difficulty of making the improvement desired; for the wonder with me is not that he has achieved no more, but that he has done so much."

"The reaper compares most advantageously with cradles in cutting heavy wheat that stands well, cutting it quite as rapidly as it would a lighter crop, while the cradles would not do; or in cutting fallow wheat that inclined altogether one way. The fallow wheat, however, must be cut the way it inclines, the knives going under it, and it is laid beautifully as it falls from the machine, for the binders; but the machine must

be cut without cutting. I am not of opinion that the reaper will answer in all situations, or will even supersede the use of the cradle altogether; but I incline to think that it may be used to great advantage in securing parts of almost every large crop; at least on level land."

After timing these machines repeatedly, I have not been as yet able to get either of them to cut more than an acre per hour, and, by the way, that is quite expeditious work in heavy wheat. Before trying the reaper, I had supposed that good scythening would average more than 2 acres a day in good wheat, but I am now convinced that this is quite as much as can be done. My overseer, Mr. Adams, who superintended the machines, and is quite a judicious man, entertained the belief that 15 acres might be accomplished by the reaper in an hour, with fast horses and superior driving. It is probable too, that the experience of another season might enable us to effect more than we have yet done. But still I doubt if an acre and a half an hour can be counted on for many consecutive hours."

An observant gentleman of Charles City, and a practical farmer too, who has one of these machines which he worked last year, informed me recently that it would cut down sixteen acres of wheat a day, or would do the work of eight cradles. The testimony of this gentleman is every way entitled to credit, and justice to Mr. Hussey seems to require that it should be mentioned. I presume of course that some allowance was made for the time lost in the morning and evening, when the straw was damped."

Another trial was made by R. B. BOLLING, of Sandy Point, who remarks:—

"I feel satisfied that the principle is a good one, and may be successfully applied to the object intended, and that the machine is destined when the inventor shall have better perfected its mechanical arrangements, which he can, with his greater experience, easily do, to be an invaluable acquisition to the farmers of the wheat-growing region of country. With three mules, a man to drive and one on the machine to rake the wheat from the platform on which, as it is cut, it falls, we estimated that rather more than one acre per hour was reaped. By Mr. Hussey's calculation the machine must cut one acre in every two miles that it travels through the wheat; 15 acres therefore by this calculation, may be reaped in a day with one machine, pulled by travelling thirty miles, a distance not too great on level land, through large fields, where there would be but few turns. The cutting of the machine where the wheat was rankest was the best, leaving not a straw scarcely standing after it, and rendering glancing entirely unnecessary. The wheat for the 'pickers up,' or binders, was deposited more evenly and in much larger quantities together, than after the cradle, and with these advantages to the pickers up, eight were not always able, when the wheat was rank and abundant, to gather, tie, and remove the sheaves from the track of the machine, as it passed around the square. The machine does not cut well early in the morning, when the wheat is moist; it cuts best when and where a cradle would do least—in rank wheat and in the hottest period of the day. I have concluded to procure two for the next harvest, satisfied that much manual labor thereby may be saved, at a critical and important season to the farmer, when labor is always scarce, and especially on the lower James River at that time."

The Editor of the Register remarks:—"Both these trials were undertaken at our request, and we are confident that both the individuals used every care to have full and fair trial made, and the facts and results accurately noted. It is unnecessary to add that nowhere could such confidence be better placed."

Yucca Gloriosa.

There is, at the present time, in the garden of Mr. Baynton, of Hartest, near Bury St. Edmunds, a large specimen of the above plant with two flower stems, one of which are upwards of 400 blossoms. Some one lately recommended the application of a decoction of soda to dahlias. A friend of ours tried it in a very weak solution (about 1 oz. to a gallon of water) and applied it once to each root in the dry weather of June. The effect has been a rich and powerful foliage. It is not too late to try it with great caution, guarding against the chance of excess.—*Leamington (Eng.) Spa. Chron.*

A Letter from Illinois.

MESSES. EDITORS:—The following is an extract of a letter written by a gentleman of considerable travel and acquaintance through the great west, and so far as refers to your portion of country we were prepared to attest to the correctness of his remarks, and you may confer a favor on such as may wish to migrate to the west by giving this a place in your paper.

Yours, &c.,

FREDERIC BRACKETT.

Brackett's Mills, Illinois.

"In all my acquaintance through the far famed west, I have not found a section of country that in every respect as well unites all the great requisites of the farmer as that portion embracing the south part of Effingham and the north part of Clay counties, on the west side of the Little Wabash river, in the State of Illinois. These prairies are small, averaging only from one to three miles wide; high, dry, and extremely fertile; and the rivulets or small creeks which divide these small prairies are bordered with as good timber as I ever saw in the United States. They also afford great quantities of valuable rock both of the limestone and freestone, and inexhaustible water.

This is the only prairie country in which I have ever seen all these great advantages in such abundance. Spring water is common both in the prairies and timber land, and excellent well water is obtained by digging from fifteen to thirty feet, any where in the country.

The first year, the prairies here are somewhat harder to plough than old blue grass pastures; they are then planted in corn, and without any further cultivation they yield from fifteen to forty bushels per acre. The next year and onward they are extremely light and productive in all kinds of grain and vegetables suitable to the climate, thus is seen at once the great advantages that result to persons who locate in the west;—no clearing of farms, only fence and plough; and the country being entirely free from stagnant water I have no doubt of its general health. It is worthy of remark that all this part of the country is entirely free from that distressing disease called the milk sickness.

Notwithstanding an almost unparalleled drouth from the middle of May until the first of September, corn in this vicinity will yield at least fifty bushels per acre this season. I earnestly recommend this portion of country to yourself and friends, but what you do you had better do soon, as the land will doubtless be purchased rapidly.

Strange as it may appear there is yet more than nineteen twentieths of this beautiful and fertile country remaining to be purchased of the Government at \$1.25 per acre. It has been overlooked by travellers until lately, for want of roads passing through it,—but it is now settling rapidly. Yours truly,

A. B."

Sketches of Travel.

In a recent jaunt as far east as Madison and Champaign counties, that which struck our attention most was the great number of rural visitors on the road, journeying, almost without exception, in expensive steel springed carriages and buggies, with elegant side seats, the horses caparisoned with brass mounted or plated harness, the dress and baggage of the travellers in keeping with the equipage.

Twenty years ago when we passed through this country our springed carriage was looked on as a struggling *crack*, to be wondered at rather than admired, much less to be desired. Our teams were more common than horse teams, I doubt whether there was a farm, then within ten miles square, who could boast of a spring carriage or a plated harness. Two farmers would then once a year fit out a team

for Salt Point to buy salt, by furnishing each, a horse, with a certain quantum of rope and leather called a *hacking*.

If I was asked what has produced this great change in the social condition of our Rural population, I should say, it was varied and increased production. The birth or introduction and increase of the mechanic arts in the country has not been a whit behind the progress of agricultural industry; it may be said that from the nature of their mutual wants, they have incidentally stimulated each other. Thus has Hamilton grown up with its endowed seminaries and schools,—and log city has been converted from a little city of logs as its significant early name implies, into one of elegant mansions, Grecian cottages, extensive factories, and workshops.

There is not so general an appearance of rural thrift in the counties of Madison and Champaign, as in our own Seneca, but their cold rough hills, and wet hollows they have better pasture, more butter and cheese, more cattle, and the sweetest water in the world, we felt that such water in Seneca county could not fail to establish a perfect temperance reform.

The hop yards of Madison have of late almost entirely disappeared; over production reduced the price so low that the culture is generally abandoned; the consequence is that this year the price is unusually high. It is said that one man will clear \$4,000 on ten acres of hops this season. He applies to his hop grounds all the manure of a large distillery, by the aid of which he is alone enabled to realize such large profits. Hops require a cool moist climate, but dry and very rich land.

S. W.

Waterloo, Sept. 18, 1841.

Indian Corn, the King of Edibles.

A Farmer from Oneida county, now on a visit here, says that our farmers strangely overlook the advantage of our warm dry climate for Indian corn—he says that they seldom fail to get 60 bushels to the acre there on an old sward, if they only have sun and dry weather enough to ripen it; he has seen 60 bushels raised to the acre this season, without the aid of manure, but it was well tended with hoe and cultivator, two implements "but little used" he thinks in our corn fields. Even in the south part of Oneida county a great grass ridge, corn stalks in the bundle are worth ordinarily \$8 per acre.

When I see a farmer peddling a load of pumpkins through our village, boasting of their superior size and quality, verily thinks I to myself, that man boasts of his own shame—the pumpkin growing farmers may have pumpkins, but they will have no corn this year. The kindly influence of a warm sun, while it has done wonders for the thrifty industrious farmer's corn, has proved too strong a stimulus for the late planted, half matured, and worse tended corn, of the mere pumpkin grower.

Perhaps there never was a season when corn repaid the labor and attention bestowed upon it better than this year; on the other hand never did the neglected field yield less. I have seen some fields where the weeds far outweighed the stalks, and others of like soil, where the stalks were worth more per acre, than the grass from our best meadows.

Although grass and potatoes, in consequence of our long drouth are not half a crop, I have no doubt but that if our Indian corn had been only planted on rich land and the earth kept loose by the hoe and cultivator, the crop this season would have been far above the average.

I have observed that the stalks this year, after the corn is ripe are full of saccharine matter, both horses and cows devour even the husks with avidity.

Either from bad farming or some other cause, it would seem that western New York is fast losing its

quondam character as a wheat growing region.

If I mistake not, its reputation as an Indian growing country has always been too low, me from the fact that its culture has been neglected the more profitable production of wheat. But when we have no more of nature's own virgin soil insure large crops of wheat at little expense, we must that more attention will be paid to that much abused prince of edibles for both man and beast, Indian corn.

Waterloo, Sept. 18, 1841.

S. W.

Wheat Culture.

MESSES. EDITORS:—It appears to me that the culture wheat has not received that attention from agricultural writers which its importance demands. I think it would of great benefit to our readers if our wheat growers would generally give us the results of their experience, if their mode of practice in this branch of farming. There appears to be much diversity of opinion on most points connected with this subject; and for one I should like to know the opinions and practice of the most successful wheat growers in this country, particularly with reference to the manner of preparing the land, the time of sowing, quantity of seed, and mode of preparation, if any.

As far as my own experience goes, I think I have obtained the best crops by following the land, with three till ploughing; throw into ridges of seven or eight rows wide sown from the eighth to the sixteenth of September; five five and a half pecks of seed to the acre; prepared by sowing in line water from twelve to sixteen hours before sowing; the seed harrowed in. I have some seasons sown a wheat about the first of September, and when that has been the case I have almost invariably suffered more or less from the ravages of the fly. I think early sowing renders who more exposed to this evil. Such is my practice, and if any of the correspondents of the Farmer can suggest improvements on it, I shall be happy to learn and adopt them.

"Old Genesee," August 1841.

M. N.

REMARKS.—We thank M. N., for calling the attention of our readers to this subject, and we unite with him in the request that others will favor us with a description of the practice in wheat cultivation. We hope however the will be more particular than our friend M. N., and not forget to mention the kind of soil, depth of ploughing, kind of wheat, and the quantity of produce; and not omit to sign their names.—Eps.

The following suggestion we believe to be of great importance. The advantage of a wheel over swing ploughs, was fully demonstrated by the accurate and repeated experiments of Prof. Pusey in Scotland. Ploughs of nearly the same actual weight were found to differ in the strength of the draught, required to move them on the surface of the ground, as *four to one*, when without, in one case, and with a wheel, in the other. This great difference must be obvious when it is considered, that the chief weight of the plough is brought by the draught upon the wheel which otherwise has to drag heavily along the ground. The friction occasioned by this dragging, it is plain, must be greatly increased, when fifty or a hundred weight of earth is constantly pressing upon the mould-board. As very few of our ploughs in this region are furnished with wheels, we beg leave to call the attention of farmers to this subject.

For the New Genesee Farmer.

Wheel Ploughs.

MESSES. EDITORS:—It is rather late in the season to talk about breaking-up ploughs. But I consider it of much importance, and hope it may draw out something from our brother farmers, that will not be forgotten before another spring.

We all know that the breaking of the "fallow ground" is the hardest job that we have in preparing the ground for the seed. It is important then that we manage this business to the best advantage. We have in our country a great variety of "patent ploughs," some of which we think good ones, and all undoubtedly real improvements upon the old fashioned ploughs. Of the merits of any particular pattern I shall not speak. I will only say to my brother farm ra, get the best

you can find. It costs no more to make or buy a plough than a bad one.

but there is an article of gearing which I consider of great importance in ploughing, that I am sorry to say is not yet in general use, at least in this part of the country. I refer to the wheel under the end of the beam, as a granger. It is important that the land be trenched as nearly even as may be. With the wheel we can manage this to your liking.

Besides it is well ascertained that the team will perform the labor much easier with the wheel than without. Some say that two horses with the wheel will form as much and with as much ease as three without. I am not entirely satisfied that there is this difference, but there is no doubt a great difference in the use of the wheel. My plan is to put on three horses, then let the plough go in according to the strength of the team, I care not how deep. I think that we have not been in the practice of ploughing deep enough.

It may be well to describe the manner of fastening the wheel to the beam. There are several different ways of doing it. Some mortise a hole through the beam just back of the clevis, large enough for a stout rod of iron, which is split at the bottom, or another is added, and spread so as to receive the wheel. A mortise should be secured from wearing on each end of the beam, by fastening on wide stout band iron, a hole through of the same size. The end of the beam that runs through the beam has several holes in it, so that it can be raised or lowered at pleasure, and fastened through the beam with a bolt. Another way, and which I like the best, is to take two rods of iron of sufficient size, bend them in a half round form, with holes for the gudgeon of the wheel run in, at the lower part of the circle; one end of the bars should have several holes in to raise or lower the wheel. In order to do this, the bars must be of true of course. The wheel should be about 8 inches in diameter and about 2 inches broad.* The bars for three horses should be made on purpose for use, with no set to land and an extra amount of iron where the wheel is used, so that the plough will line in to dig into the earth. I have two beams for breaking plough, one for three horses and one for two.

It is a short job to shift them. The coulters are generally used, that it will probably be of no use to talk of its merits. But I have written more than I needed.

A FARMER.

Alcous County, August, 1841.

For the New Genesee Farmer. Murrain in Cattle.

"A grain of prevention is worth pounds of cure." I have given my cattle for several years past, plenty of malt mixed with equal quantities of house ashes. Some of them have been troubled with the murrain, but I believe it will effectually prevent it—only give in as much as they will eat.

N.

Cold Water

May be safely drank in hot weather, provided a man will first wash his temples and wrists with it. I have tried it for years (with the above precaution) about the least injury.

N.

Michigan, August, 1841.

For the New Genesee Farmer. Disorder in Hogs.

Under this head a correspondent in the last number of the New Genesee Farmer, who signs himself W. respectfully calls for information concerning a certain lameness which sometimes attacks his hogs during the hot season of the year.

In order that the wheel may not sink in soft ground, and start rather than assist the plough, it should be as broad as large as circumstances will admit, and it may be well to have the beam may be so made as to be considerably elevated, so as to admit a larger wheel.—17a.

ing the hot season of the year. I have reason to attribute the lameness he complains of, to the closing of the *issues* of the hind legs; which I think is caused invariably by inflammation produced by high feed, such as corn and barley meal, without first undergoing the process of fermentation. Having had several hogs attacked in the same way some three or four years ago, while being fed with the above-mentioned food, and every expedient in the way of common dosing proving inefficient, we had recourse to a neighbor of ours who had had experience in pork-making; he immediately informed us of the cause; we caught the hogs, and by a thorough rubbing of the pores or *issues* of the legs with a *cob* they were made well in twenty-four hours.

No. Cortland, Sept. 21, 1841.

ENGLISH NEWS.

Liverpool Grain Market.

Sept. 3.—We had rather more inquiry at this morning's market for wheat and flour, both free and bonded, and in the few sales which have taken place the prices of Tuesday last were obtained. Oats and corn meal were each dull of sale, but at no decline on their previous value. Other articles in the trade met with but little attention, and no change in prices from the quotations of Tuesday last.

The Weather and Crops.

The beautiful weather has made a great and excellent change in the harvest, a good deal of all sorts of corn has been secured in good order, and many farmers in the West have cured all their wheat; but on the Downs, the quantity of weeds and green stuff in the barley, has induced the farmer to use every moment he could to secure that crop, and hence we see large pieces of wheat still standing out. Another week of fine weather will secure, pretty nearly, an average crop of wheat, but of course there are exceptions.—*Brighton Paper.*

The wheat crops come to hand much heavier and better than was expected. The forward oats have been got in well, and the backward crops look promising. The late fine weather is expected to work great improvement in the barley. The peas that have been harvested turn out well, and the beans are flourishing.—*Maldstone Gazette.*

The harvest has been generally good in the neighborhood of Newark, and in some places a good deal is housed; but the rain of Tuesday night has greatly retarded the harvest.—*Lincoln Gazette.*

The harvest of Tyne side has commenced, and will be general in this neighborhood in another week.—No new wheat has yet appeared in Newcastle market, but it may be expected that supplies will be shown on Saturday next. It is generally considered that the wheat in the northern counties will be better in quality than that of the greater part of the southern districts, where the weather has been more unfavorable than with us. The weather has been very warm and dry since our last.—*Tyne Mercury.*

The weather is very fine. We need scarcely add that the farmers have been "making hay while the sun shines," and that the harvest is drawing to a close in our locality. The accounts as to the yield are very contradictory, some maintaining that it is an average crop, and others that it is nearly so.—*Worcester Chronicle.*

The harvest has become very general in the eastern divisions of this county; we observe fields cut on Valerton, Thorntonclough, Skelton, East Barns, Barneyhill, Onwellmans, Wester Parkerton, Brandsnill, Newlances, East-Broomhouse, Newhouses, Litchfield, West-Barns, Belton, &c. The barley and oats seem of an average bulk, the wheat generally "stooks" light. The weather has been very wet, but should it clear up, next week harvest will be general.—*Intercessor Courier.*

Pickles.

About this season of the year, the good mothers and wives throughout the country, tax their ingenuity to the utmost to make pickles of every thing that comes within their reach. Nothing escapes them. They pickle potatoes, and cucumbers, and peppers, and tomatoes, and beans, and nasturtiums, in short, every vegetable they can lay their hands on, and that is in an admirable state of villainous immaturity. Such a borrowing of brass knuckles and such a scouring,

and paring, and summering and stirring, as is going on from one end of our happy land to the other, is a caution to young folks, for if one of these youngsters happen to kick up a row in the midst of this hurry and bustle, and thus interrupt the harmonious clanging of pots and kettles, he is almost certain to have his little roachy pickled very handsomely, and at the very moment when he least expected or desired the favor.

We have just hit upon a receipt for making a glorious pickle, which we copy for the benefit of housekeepers generally. It is like all other pickles, about as indigestible as the doctor or the undertaker could wish, and would give Old — himself the gripes in five minutes if he were to swallow it.

MARROWS.—These are made of green muskmelons, as late in the season as possible. The common muskmelon makes the best marrow. A small one is cut from the side, and the seeds carefully scraped out; it is then soaked in salt and water three or four days; when taken out it is sprinkled on the inside with powdered cloves, pepper, nutmeg, and filled with strips of horse-radish, cinnamon, small strong beans, small pieces of the root, nasturtiums, small onions, radish tops, &c. The crevices are filled with whole mustard seed.

The excessive fondness of these diabolical compounds, which prevails more particularly among the younger portion of the fair sex, is at once the cause and evidence of ill health. We have seen more than one of these loveless creatures, whose nature destroy her health and life, by the use of these unnatural stimulants, actually pickle herself to death!

We advised the young men a short time since to marry, every mother's son of them, and we now advise them to be particularly careful of marrying girls who are very fond of pickles, and will eat a half gallon full of them at every meal.

If they do not take our advice, and marry animated vinegar crutes, they may, perchance, escape being poisoned themselves, but they will assuredly have a weary time of it in this world, with their sickly, peevish, half-dead wives.

The danger we run in making these assertions, is great. The ladies will all be in arms, or rather in tongues, against us. But we do not fear to encounter it. We write for the benefit of posterity, and of the present race will not do us credit for our good intentions, the next will.—*Hannibal Journal.*

"Pearl Bailey" of the West.

The editor of the (Detroit) Western Farmer has politely sent us a small sample of what he calls "Pearl Bailey." He says respecting it:—

"A new kind of barley has been introduced into Wisconsin by an emigrant. A gentleman at Green Bay, last spring, obtained a quantity of the seed and has raised 150 bushels. The seed came from Russia, and is a large plump kind, and weighs considerably more than our common barley. A bushel weighs 69 pounds. It makes fine bread, and is nearly equal to wheat. It was sown on the 15th of May and harvested in July, and with proper cultivation, it will yield from 35 to 40 bushels to the acre.

We have a small quantity of it in our office, and invite the agricultural public to call and examine it. It is the best article that has ever come under our observation. At our request, a quantity of it will be sent to OLIVER NEWKIRK, of this city, and WM. S. MAXNARD, Esq., of Ann Arbor, for sale."

The above named barley is not a new kind, but one which we have long known by the name of *Two-Roo* at Nuked Bailey. It bears long heads, and handsome grain which threshes out of the chaff like wheat. Small quantities of it have been sold at the Rochester Seed Store for several years past, but its cultivation in this country has never to our knowledge been found advantageous. Lawson, in the Agriculturist's Manual, says, "this variety has been introduced to the notice of agriculturists at various times and under different names, but its cultivation has always been abandoned, or at least, never carried to a great extent. The straw becomes very brittle and tender towards the period of ripening, so as to be unfit for supporting the ears."

From Manning's Book of Fruits

One of our best European Pears, the "Duchess of Angouleme," when grown as a dwarf produces a fine large fruit, but small and greatly inferior when grown upon a standard.

Chemical, or Prepared Manures.

It is sometimes asked, and that too in a way indicating a belief that the question cannot be satisfactorily answered, what are the advantages that science has conferred on Agriculture? more than intimating that knowledge, so essential to all other pursuits, is of no value to the farmer. It is sufficient reply to all this, to simply point to the articles named at the head of this paper: chemical, or prepared manures. For the present we shall confine ourselves to a single class, those derived from urine and night soil, or of which these furnish the most important part.

It may be said that the use of night soil has been known from the earliest ages as a manure. This is true, but its use has always been limited, owing to prejudices arising from its disagreeable nature, and its offensive odor. The celebrated Swedish chemist, Berzelius, was among the first to call the attention of moderns to these substances by his analysis of them, which gave the following results:

Night Soil, 100 parts.	Urine, 1000 parts.
Water, 73.3	Water, 933.00
Vegetable matter and animal remains, 7.9	Vegetable matter and animal remains, 3.71
Bile, 0.9	Sulphate of potash, 3.16
Albumen, 0.9	Phosphate of soda, 2.94
Penicillar and extractive matter, 2.9	Muriate of soda (common salt), 1.15
Salts, 1.1	Phosphate of ammonia, 1.65
Insoluble residue, 11.7	Muriate of ammonia, 1.40
	Acetate of ammonia, 17.11
	Animal matters, 1.00
	Earthy phosphates & Phosphate of lime, 0.35
	Silica and mucous, 0.35

The intelligent farmer will see at a glance that the matters enumerated in these tables constitute most efficient fertilizers, and in spite of their repulsive nature, the French farmers have long been in the habit of mixing these stercoraceous matters with water, which, applied with much labor to their fields, gave a fertility unknown to the rest of Europe. Some 28 years since, Davy suggested to his countrymen, the English, that night soil was a very powerful manure, liable to decompose, soluble in water, and in whatever state it is used, furnishes abundant food for plants. He found, by experiment, that quick lime destroyed the disagreeable smell, and ascertained that it might be dried, pulverized, and delivered by drills at the time of sowing the seed. The manufacture from night soil of the valuable manure, called *poudrette*, belongs to the French. Nearly 40 years since, a chemist, M. Bricot, obtained a paper for his *patente* exclusive, manufactured from the cesspools of Paris, and such was his success that similar manufactories were erected all over the country, particularly in the vicinity of the large cities, so that what was once nuisance, is now deemed of the greatest value.

In 1811, the French Royal Society of Agriculture granted a gold medal to Madame Vibert Dubou, who obtained a patent for 15 years for her "Alkaline Vegetative powder." Her plan consisted in fermenting the most liquid parts of those matters, and mixing them with slaked lime afterwards so as to form a powder much superior and more durable in its effects to common *poudrette*.

In 1818, the first manufactory of "Urate" properly so called, was commenced near Paris, by the chemists Duval & Co., and the product was submitted to the examination and test of a committee of chemists and agriculturists, in which were included some of the ablest men of France. This committee reported that they had found the preparation so powerful on the dullest soils, that they recommended it should only be employed by skillful and discriminating farmers. On good soils, or in large quantities, it gave such a growth of straw as to be fatal to the maturity of the grain. The whole matter collected from the cesspools of Paris, is now converted into *poudrette* and urate, and is used by the farmers and gardeners, principally within a circle of 30 miles around Paris.

A new preparation called "*engrais animalisé*," or disinfected night soil, has recently been introduced at Paris, and a large manufactory has also been established at White Chancel, near London. It is made by mixing the night soil with a coarser be quantity of finely pulverized charcoal, and then drying the mass at a very gentle heat. This prepared it resembles the friable mold, rich and dark, of an old hot bed, and is totally devoid of smell. The English farmers, if we may judge from their reports and journals, are highly pleased with this manure, particularly as a dressing for turneps, giving them a quick growth at the start, which is of great importance with this root. There is another preparation called "Owens's Animalized Carbon" principally brought into England from the Baltic, one ton of which is consid-

ered equal to 25 bushels of crushed bones, while the cost is but little more than half as much. It probably differs little from the cognus animalize, except that it contains more carbon, and, of course, is a less powerful manure.

There is a chemical preparation called "Seed Manure," prepared by Messrs. Hodgson and Simpson, of Wakefield, England, the composition of which is a secret, but the base of it is, doubtless, urate, mixed with a portion of stercoraceous matter, ammoniac, salt, and nitre. Their directions are as follows, and by following them Mr. Milburn and others have experienced the best effects on their crops.

"Dissolve 28 lbs. of this manure in a pail by adding water in small quantities stirring it at the same time, until the mixture is of the consistency of cream; it is then poured over the seed intended to be sown on acres of land, and the whole repeatedly turned over, so that it appears one uniform mixture; the seed is then to be spread out thin, on the floor to dry, for ten or twelve hours, and mixed with a sufficient quantity of soil or any kind of ashes, to render it sufficiently friable or dry to be sown by the hand or by the drill."

Prof. Johnson in his valuable papers on manure, has the following remarks on these chemical preparations of night soil, particularly the carbonized class, which, when properly made, he seems to consider preferable to any other of its mixtures.

"The preparation of the Messrs. Pottewin of the *cognus animalize* at London, is the same as that of M. Payen at Paris. It combines, and successfully too, the great object of drying off the water of night soil by a gentle heat, after all its gaseous matters have been absorbed, by mixing it with a portion of newly prepared carbon, in the finest possible state of division, than which, no known substance has such great powers of absorption of all gaseous matters like those which abound in, and impart the disagreeable odor of night soil. The presence of the carbon in the manure thus prepared, is valuable in two ways; it gradually combines with the oxygen of the atmosphere, forming in the state of carbonic gas, the food of plants; and at the same time, all the gaseous matters of putrefaction, with which it is saturated, are thus preserved, soiled up, as it were, for the use of the roots of the cultivator's crops: nothing is lost, the emission of the gases from the slowly dissolving charcoal, being so gradual, as to be almost, if not entirely, imperceptible to the senses."

The justly famous preparation, called as above "Urate," may be very successfully imitated by the common farmer who will take the pains to provide a reservoir or cistern for the preservation of urine, with which, when wanted for distribution with his seed, he must mix gypsum or plaster till the urine is absorbed, and the mass sufficiently dry to sow with the drill or by hand. This is one of the most powerful preparations on dry or sandy soils that can well be imagined, and is one of which every farmer may avail himself to a greater or less degree.

There are at the present time, two manufactories of *poudrette* and *urate* in the vicinity of New York; and there is most abundant proof that it constitutes here as elsewhere the most valuable class of manures. That such manufactories will become common in the neighborhood of our principal cities and towns, where alone the materials are to be found, as the value of such manures, both for the efficiency and portability are better understood, we have no doubt. Their use is rapidly converting the vicinity of the principal European cities into a garden, and the use of these materials which have constituted the greatest nuisances and were most productive of diseases, into manures, will not have a better effect on the soil, than on the health of those congregated masses of human beings.

J. H. Culticator.

Tomato Figs.

PATENT OFFICE, July 10, 1841.

DEAR SIR—The medicinal qualities of tomatoes have greatly increased their cultivation, and every new preparation of the article is deserving consideration. A sample of "tomato figs" has just been deposited at the Patent Office, of a superior quality. From the taste I should suppose all the good qualities of the fruit are retained. In appearance, the drum of tomatoes resembles one of figs so nearly, that they might easily be mistaken for the same.

The sample is deposited by Mrs. Steiger of this city, and the recipe transmitted with it is enclosed for publication. It is deeply to be regretted that since the periodicals of the day are open to communications, time so many valuable improvements are lost to the world, barely for the want of publicity. Others may

have dried the tomatoes with a recipe, however successful.

Very respectfully,
Hon. J. S. Skinner.

H. L. ELLSWORTH.

RECIPE.—Take six pounds of sugar to one peck (or 16 lbs.) of fruit. Scald and remove the skin from the fruit in the usual way. Cook them over a fire in their own juice being sufficient without the addition of water, until the sugar penetrates and they are clarified. They are then taken out, spread on dish flattened and dried in the sun. A small quantity of yeast should be occasionally sprinkled over them while drying; after which, pack them down in boxes treating each layer with powdered sugar. The syrup is afterwards concentrated and bottled for use. They keep well from year to year, and retain surprisingly their flavor, which is nearly that of the best quality of fresh figs. The pear-shaped or single tomato answer the purpose best. Ordinary brown sugar may be used, a large portion of which is retained in the syrup.—*American Farmer.*

For the New England Farmer.

TRUE GLORY.

BY DEWITT C. ROBERTS.

MAN seeks CONTENT on every shore—
Where deserts spread—where oceans roar!
What recks he danger, toil or blood,
By famine, shipwreck, field, or flood?
What boots it where his footsteps roam,
If he seek not the prize at Home?
Deluded man! vain dreamer! cease!
Say? what can set the mind at ease?
Can gold-lust serape from Africa's sands,—
Can diamonds wrought by servile hands—
Can rapine, war, or murder yield
Aught, save to Fame—a bottle held?

Go! to thy honest toils again!
Buck! speed the plough and till the plain,
Thy bristling grain, in thick rows set,
Shall rival e'en the bayonet—
Thy maize, arrayed along the land,
Shall image many an armed band—
Thy gold, the yellow maize shall be;
Thy gems, the dews that deck the lea;
Such be thy glory—such thy wealth;
Thy rich reward, content and health—
Nor prouder spoils e'er won the bay,
Or deck'd a Roman triumph day!

July 5th, 1841

Anti-Corn Law Agitation in England.

Papers by the Britanniun bring us the accounts of the opening or first days' session of the great Anti-Corn Law Conference of Ministers, at Manchester, on the 17th of August. More than 650 Ministers had a nounced their intention to be present. The people of Manchester vied with each other in hospitable arrangements to entertain the reverend gentlemen. The Conference assembled in the Tower Hall, the bench of which were completely filled. The Rev. Dr. Zinkin was called to the chair.

In his opening address he spoke of the present meeting as without a parallel among the councils and synods recorded in ecclesiastical history. Ministers of Christ from all parts of the Empire, not in hostile array, sect against sect, and party against party, with the narrow lines of sectarian demarcation, but occupied with an object greater than that which could have engaged the minds of the most eminent Christians. They had met at the call of suffering humanity, who reached their ears, not from a foreign land, but from the green valleys and populous streets of their own beloved land. At the outset, however, they were met by the question, "What have Christian men, and above all, Christian ministers, to do with temporal power?" But when they became the denizens of an other kingdom, were they to abandon the duties of this? It was not necessary, when they became Christian that they should cease to be men. For his own part he would have considered himself a traitor both to religion and humanity, had he refused to obey the sun motion to attend the meeting.

What was the present situation of the empire? Here was a country great in arts and arms—the school of science and literature—the mart of literature—the cradle of luxury—the emporium of the moral world—occupying the highest position amongst surrounding nations, and shedding its light over the most distant lands. Yet this country, possessing within itself, inexhaustible resources, whilst it was the richest in the

world, was in one sense, also, the poorest. Its population, instead as it was with arid, and unimproved its industry, was unemployed, and in want—rooms were silent—manufactures were closed—commercial men looked at each other in consternation and despair! What was the cause of this extraordinary state of things? It was to be found in the laws which prohibit the exchange of labor for food. The eyes of the country were turned upon Manchester. It was necessary, therefore, that those assembled should stand clear from all imputation, and it was most desirable that they should avoid committing themselves to any sensitive line of party politics, which might compromise them in public opinion. Let them adhere only to principle, but avoid giving offence to any one—insisting to the courage of the lion the gentleness of the lamb.

Dr. Pye Smith followed with an energetic appeal to the sympathies of his audience. He contended that the Corn Laws were a part of that vicious system of legislation which had its origin in the night of ignorance and barbarism. Some persons objected to the part in the proceedings of the Conference before they said it was interfering in a matter of fiscal regulation. Such ought not so to be received. He protested against the doctrine that ministers of religion ought not to interfere with politics. The alternative now presented to the country was this—removal of iniquity, or the ruin of the nation.—*Emancipator*.

Irrigation.

The effects of running water flowing over grass lands, is so highly beneficial that every farmer should ascertain whether there is not some portion of his lands which may be cheaply irrigated. We cheaply, because the price of lands in this region is not high enough to justify such outlays as are often profitably made in England and on the continent of Europe.—The waters of many a small stream in our hill country, right by a few hours work with the plow, may be carried along the hill-side in such manner that they would erode through the slight embankment and nourish vigorous growth of grass on all the sloping ground all the way down to the river or canal. This is cheap manure—applying itself year after year—and long maintaining the fertility of the soil unimpaired. At the base of the hill it will often be necessary to open a drain for the water which finds its way down. Should it come to flat and cold soil, as it often would, at the termination of the descent, that soil would be injured. While flowing water is favorable to vegetable growth, stagnant water is baneful. Wherever the farmer can cause water to flow over his grass lands without stagnating upon them, he will find great benefit from the percolation. The following article from the Southern Agriculturist, will be read with interest, though it describes processes more expensive than most cultivators will be ready to adopt.—*N. E. Farmer*.

WASHINGTON, April 2, 1841.

To the National Institution for the promotion of Science:

Since the brief statement of the advantages of irrigation appeared in my discourse delivered before the institution in January last, I have received so many applications for information on the manner of watering land, that I am induced to believe a more extended notice of the subject may be acceptable and useful.

The numerous and abundant rivers, streams, and brooks, which traverse our country in every direction, afford great facilities for irrigating the soil, and thousands of acres of barren land might thereby be rendered as productive as any in the United States.

The thin soils, which drain dry and easily, profit most by the use of water, and are the least productive without it. The gravelly, sandy land of Chile produces by irrigation, upwards of thirty bushels of wheat to the acre, and the poor lands in the neighborhood of Mexico, are made equally productive by this process. The great advantage, however, to be derived from the free use of water is not so much in the increase of grain, as in that of grass crops. A water meadow attached to a farm, gives the farmer an abundance of manure for that portion of his land which he keeps in tillage; for he may convert into dung the whole of the hay it produces, while it requires nothing in return but watering.

In the Carolinas and Georgia, the low lands bordering on the rivers are irrigated as high up as the influence of the tide extends for the cultivation of rice. The water is admitted into ditches parallel and perpendicular to the river, and thence distributed by feeders over the whole surface, so as to drown the land, by opening the sluices when the tide is rising; and after keeping it there as long as is deemed necessary, it is

let off at low tide. This method might be practiced with great advantage on all the tide-water rivers throughout our country, where the banks are low enough to admit the water at high tide. Flat lands that have not the advantage of tide-water, are the most difficult to irrigate successfully, for it is essential that when the water is let off, the land should be drained perfectly dry; otherwise it will produce coarse grass of inferior quality.

Lands that have a gentle slope, even steep hill side, are better adapted for irrigation, as they admit of the water flowing over them without covering the top of the plants, thus giving them the advantage of air and moisture. A gentle current is considered more advantageous than stagnant water, and the land thus situated will always drain dry when the water ceases to flow. On level land, it is necessary to conduct the drain so far from any center the river low enough to ensure a sufficient fall to dry the land.

Where the stream is rapid and the fall great, it is not necessary to construct any dam; but simply to tap the river high enough up to lend the water along the highest part of the field; but where the current is sluggish, the water must be raised by a dam erected at the point where it is to be used.

There are two methods of watering lands. The one by dividing the field into regular beds, and the other by what is called catch work, which is resorted to where the form of the ground is irregular. It varies therefore with the circumstances of the land it is proposed to water; but the conductors, feeders, and drains, must be laid so as to profit by the natural movements of the soil both to water and to drain it.

The first thing to be done by the farmer who desires to irrigate his fields, is to take an accurate level of the ground which he intends to water, so as to compare the highest part of it with the height of the water to be used. The surface of the water must be eight, twelve, or twenty inches higher than that of the land, according to the distance of one, two, or three hundred yards from the one to the other. The main conductor is then to be cut from that point as straight as it can be, to lead to and continue along the highest side of the field.

If the land has any swell on its surface higher than the rest, it will be necessary to give to each of them its own conductor, with feeders branching from it, to convey the water over that portion of the field. The width of the conductors must depend upon the quantity of water they are required to convey; and be deep enough to receive the muddiest portion of the stream; for although the land will profit by being covered with clear water, it is more enriched by the deposit of turbid streams. Each conductor is to be provided with a sluice to regulate the admission of the water. In case the river does not run in such a direction as to allow the water, after flowing the land, to be discharged directly into it, a main drain must be cut along the lower part of the meadow to receive the surplus water and convey it to the river. This should be of the same dimensions as the principal conductor. The portion of meadow to be watered by each conductor is next to be divided into beds from thirty to fifty feet apart, by the feeders, which branch at right angles from the conductor, running along the centre of them, except where the ground falls two ways, when it may be necessary to make the feeders nearer to one drain than the other. A bed two hundred yards long will require a feeder where it leaves the conductor to be twenty inches wide, and gradually diminishing in width to twelve inches the extremity. A drain is to be made between every two feeders, and parallel to them of the same dimensions, but reversed form; the upper part being ten or twelve inches, where the drain gradually widening to twenty inches, where it terminates either in the main or in the river. Supposing these works finished, and ready to go into operation, the manager opens the sluice to admit the water into the conductor, where he adjusts the stops in such a manner as to supply the feeders. He next regulates the stops in the first feeder, so that the water shall flow regularly over its side from one end to the other. He then repeats this process in the second feeder, and so on, until all the feeders are adjusted. The stops may be of pieces of board or of turf pinned down, if necessary, taking care to keep the heads of the pegs below the surface of the water, otherwise they are apt to collect weeds and trash.

The profits arising from irrigation are so great that they will justify a considerable outlay. The works, therefore, ought to be well and durably constructed; the dams and sluices of the best materials, and able to resist the sudden rising of the water. The beds which are already sown, are to be from thirty to fifty feet wide, should be raised from one foot to fourteen inches

in the centre, so that the water will fall gently off from the feeders which run along their summits to the drains.

I have endeavored to give such a description of the progress of irrigation as will at least enable a farmer to judge of the practicability of watering any portion of his land, if not to execute the work himself. Those who seek for further information on this important subject, may consult the works of Boswell, Wright, Smith and Johnson, London's Encyclopedia of Agriculture, and Stephens' Practical Irrigator. The construction of works for irrigation belongs, however, to the civil engineer, and it is to be hoped that those of the United States will turn their attention to the subject.

Our extensive lines of canals may, for the most part be converted into conductors, and the water be beneficially used to fructify the country through which they pass. If a blessing awaits the man who makes two blades of grass grow where only one grew before, the irrigator will be three blessed—for well watered land will produce at least three times as much grass as the same quality of soil under dry culture.

J. R. POINSETT.

Indian Corn and Sugar Beets.

We have certainly never had a more continued and scorching drought in this vicinity than that with which we are now visited. The clouds sometimes roll up and present all the usual signs of rain; but it would seem that the dry and heated surface possesses a power of repulsion, or rather a lack of attraction, for the sun again breaks out with its wonted fires, and the clouds disappear as if they were in the

“Deep bosom of the ocean buried.”

Pasture is dried up; potatoes, even those which were planted early, are no longer. But it would seem that a kind Providence has given us, in addition to winter grain, two articles of food for man and beast, which from their early rapid growth and large conducting leaves, are capable of subsisting and thriving well for a long time, without other external moisture than the dews of heaven.

We have now Sugar Beets from 4 to 6 inches in diameter growing only 12 inches apart, they were transplanted early in June. We have corn planted 13th May in drills 3 feet apart; 8 to 12 inches apart in the drills, with 1 fall or a moulch on almost every stalk. Such a growth of Sugar Beets and Corn we have never had before in the same space of ground, in any one season. A masterly farmer in this vicinity corroborates on a large scale our small experience. He also says that his clover bears the drought well.

We have no doubt but that the green stalks and Sugar Beets raised on a single acre would feed more cows at this time than all the pasture within a mile square.

A summer drought to some extent seems to us to be an annual occurrence in the champagne regions of Western New York. Hence the importance of a more general cultivation of these vegetable productions which thrive better in dry than in cold wet seasons. It strikes us that this kind of cultivation should obtain more and more, around our now rapidly increasing villages, along the canal and railroad routes, where manure is cheap and plenty, and the laborers are not few.

Waterloo, August 23, 1841.

How to Cure Corn.

Cut it off at the ground, as every good farmer will do, then draw it off and stand it up against the crooks of the fences around the field, from one to two feet thick. It will cure much better and quicker in this way than if stacked in the usual manner; it is a saving of time, and the ground will be clear for putting in wheat if desired.

REMARK.—If the field is not very small, we apprehend will require the stalks to be placed more than one or two feet thick around the fences, unless the crop is very light, or the fences of other fields are used.—*Eas*.

Driving Nails Into Hard Wood.

We have lately seen an extraordinary experiment of driving nails into hard seasoned timber, fairly tried. The first two nails, after passing through a pine board, entered about one inch, and then doubled down under the hammer; but on dipping the points of the other five or eight nails into hard, every one was driven home without the least difficulty.

Carpenters, who are engaged in repairing old buildings, sometimes carry a small lump of lard or tallow for this purpose on one of their boots or shoes.

CHOICE CATTLE, SHEEP, AND HOGS.
For Sale.—The subscriber, wishing to dispose of part of his farm stock, offers for sale the following valuable animals:—

The thoroughbred short horn Bull, *Van Arman's* 3 years old, white; bred by Dr. Hossack of Hyde Park, a good piggee.

A thoroughbred short horn bull calf, 3 months old, from the stock of a Baron Van Aensseler, of Albany.

A superior imported buck, sired by Thomas Weddle's imported Leicester; dam, an imported Cotswold.

Three three-fourths blood yearling, Dorset-hill bucks, and eleven buck-hands of similar and higher grade; and a few ewes of the same character, if desired.

A full blood Berkshire sow and sow, 2 years old; purchased from C. N. Bennett of Albany. Also a thoroughbred Leicester boar and sow, one year old; from pure imported stock; six boar pigs 4 months old, a cross of Berkshire and Leicester; and one boar and two sow pigs, 3 months old—pure Leicester.

The above animals will be sold on very reasonable terms. Part of them will be exhibited at the Monroe County Fair, it not previously disposed of. They can be seen at and at the farm of the subscriber three-fourths of a mile south-east of West Henrietta. W. M. C. CORWELL, October 1st, 1841.

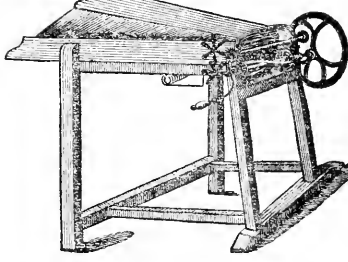
A Small Farm

FOR SALE, of about thirty acres, very nicely situated, near the pleasant village of Palmyra, and containing in part of very fertile upland, and in part of creek flats, producing two to three tons of hay to the acre annually, or rich pasturage for cows. It has a good stone house and other improvements. Price reasonable. For particulars, apply, (by letter, post paid), to

J. J. THOMAS.

Maclean, Glen & S. B. Maclean, Wayne Co., N. Y.

GILLESPIE'S STRAW CUTTER!



DEFIDEBLY the best Machine known in these parts, for cutting fodder, for sale at the Seed Store, P. & G. N. B. BATHAM.

PLUM STONES—wanted immediately at the Seed Store.

APPLE TREES FOR SALE.—The subscriber has a quantity for sale at his nursery on Main st., one mile east of the bridge, Rochester, a choice assortment of graft apple trees, of large size, warranted of the kinds represented, and embracing from 30 to 40 of the best varieties for summer, fall, and winter use. Price \$2.50 per 100. Orders from a distance containing postage or good city reference, will receive prompt attention, and the trees will be shipped or delivered according to its directions. Rochester, Oct. 1, 1841. ELECTUS T. ADAMS.

GARDEN SEEDS in Boxes.—C. F. CROSMAN respectfully informs his country friends and customers, that he will as the usual time, be prepared to supply them with fine assortments of garden seeds, of his own raising or selection, such as he is confident will give satisfaction. Rochester, Oct. 1, 1841.

MILLET SEED, wanted at the Rochester Seed Store.

MOUNT HOPE GARDEN & NURSERY, ROCHESTER, NEW YORK.

THE Proprietors of this Establishment offer for sale a general assortment of nursery articles, comprising Fruit and Ornamental Trees, Flowering Shrubs, Herbaceous Plants, Tulips, Hyacinths, and other Bulbous Flowering Plants. Double Dahlias, &c. &c.

They have also on hand a large and fine collection of Green and Hot House plants, including Geraniums, Chinese Monthly Roses, Camellia Japonica, Chinese Azaleas, Cape Jasmine, &c., &c. &c.

Orders for any of the above articles, whether large or small, will be promptly and faithfully executed, and charges in all cases will be very moderate. Persons ordering from a distance may rely on having their articles securely packed and unharmed and shipped as their orders may designate.

To such persons as are about forming new establishments or who may wish to dispose of Trees, Shrubs, Plants, &c. in their neighborhood, our terms will be very liberal.

Gardens and Pleasure grounds will be laid out in any part of the country and skilful gardeners furnished on reasonable notice, and information on any subject connected with the business will be cheerfully and promptly imparted. It is expected that persons unacquainted with the proprietors will either accompany their orders with a recommendation or name a guarantee in the city of Rochester or vicinity.

ELLWANGER & BARREY.

Rochester, Sept. 1, 1841.
 N. B. Our Fruit Trees comprise the most desirable early and late varieties of the almost every kind have been taken from such trees only as were in a bearing state and whose qualities have been sufficiently tested.

THE NEW GENESSEE FARMER,

FRUIT TREES.

FRUIT subscribers have for sale, at their Nursery, near Macedonian on the Erie canal,

3000 Peach trees, of thirty growth, at 25 cts. each, \$250 per 100.

100 Cherry Trees, (cedling trees,) from 3 to 5 ft. high 75 cts. each.

100 Apple Trees, 3 to 7 ft. high, 25 cents each, \$15 per 100. All in addition, a few hundred pear, apricot, and nectarine trees, of smaller size and of the best varieties.

The Peach trees consist chiefly of the following varieties:—Early Tatler, Early Richmond, Early Green, Early York, White Imperial, Royal Kensington, Redbliss (large red), Yellow Allergie, Red Cheek Macedonia, Late York, and Heath, forming a succession of fine fruit for more than two months.

The varieties of the apple are, Woolman's Early, Yellow Harvest, Bunch, Sea (late Nov., Burlington's Early Strawberry, Rambo, Redflower, Swain, &c.

The Cherry trees include the May Queen, Early Richmond, Black Tartarian, White Tartarian, Black Corone, Transcendental Gingham, Zensation, &c.

All of which have been prepared from bearing trees, and their genuineness or excellence fully tested by rigid examinations of the fruit, &c.

This practice will be invariably adhered to, however limited in consequence may be the supply. In propagating, free use has been made at all times of the fine collection of proved fruit in the possession of David T. Thomas of Cayuga county, and no pains have been spared by the subscribers in examining their list of varieties for examination, selected from which, in addition to the above, will be offered to the public next year.

For further assistance, directed to Thomas & Smith, Macedonian, Wayne county, N. Y., accompanied with remittance, will be faithfully and promptly attended to. Orders may also be sent with David Thomas, near Anson, Cayuga county. Particulars will please specify when any objection is made by the subscribers as to selection. W. R. S. 11th St., Macedonian, S. m. 1st.

SUMMER ALL THE YEAR.

THE subscriber having obtained the sole privilege of manufacturing the

MACEDON ROTARY FURNACE,

is now prepared to execute all orders for warming dwelling houses, academies, churches and other public buildings.

The entire plant has undergone a thorough revision; and no expense has been spared, to render the whole as perfect as possible.

The testimonials annexed from gentlemen of the highest respectability, leave no room for doubt, that

Health, Comfort, and Economy,

will be secured by the adoption of the method proposed.

The subscriber is pledged to furnish the castings, put up in the best style, at a low and moderate rate, and to have perfect confidence that he will be sustained by the merits of his invention, and the disapproval of the community.

Communications (post paid) requesting information, or enclosing orders, prompt to be executed, if addressed to Wm. R. Smith, Macedon, Wayne County, or to

DAVID ANTHONY.

Union Springs, Cayuga County.

Testimonials.

Soon after the present year commenced, I had a hot-air furnace erected, with drums of Wm. R. Smith's invention. The mildness and purity of the air that flowed into the room was all that could be wished for, and to health and ease was eminently beneficial. I had been subject to colds (catarrhs) every winter for a long series of years; but from the time of kindling the fire in the furnace until it was discontinued in the spring, I was entirely free from every symptom of the kind.

Three rooms were warmed by this furnace. From either of them when not occupied, the hot-air was turned into the other, so that the cold was wholly avoided, and by opening its ventilator and closing the other for a few minutes, the apartment was made comfortable before a common fire could be kindled.

In regard to the saving of fuel, I am not prepared to state any thing definitely; but I have seen nothing to induce me to question the very favorable statements of others. The exemption from the dirt and noise of carrying in wood, and the exclusion of wood-bosses, are points of some account; but the saving of labor in preparing the wood, is one of great value which in many cases doubles or triples its original cost.

In using this furnace, we were also free from the constraint of attending to it in cold weather, because it admits of being used in such quantities at a time as to serve for several hours, if the furnace is well regulated. In fact, when the house may be kept comfortable through most of the night without any attention whatever, and perfectly safe.

Greenfield, Cayuga County, S. m. 2d, 1841.

MONROE HORTICULTURAL GARDEN AND NURSERY.
GREENFIELD, (NEAR ROCHESTER), MONROE CO., N. Y.
 A GREATLY increased Stock of Fruit Trees, Greenhouse Plants, and other articles, and a large and high assortment of rare Green House Plants and Bulbous roots constantly for sale.

The stock of Peach and Cherry Trees on hand at the present season is large, and of early and healthy growth, and were mostly cultivated from bearing trees in the nursery or vicinity. They will be guaranteed to be true to the kind represented.

Ornamental trees and shrubs, of many kinds, of large size, can be supplied.
 Orders with due references, or money enclosed, will be promptly attended to, and trees and plants packed in a secure manner, so that they may be carried to any part of the country with safety.
 Trees and plants will be delivered on the Erie Canal, one mile from the nursery, or at Rochester, or the steamboat Landing, if desired.
 Catalogues can be had at the Rochester Seed Store or can be sent at applicants per mail if requested.
 GREECE, MONROE CO., N. Y., August, 1841. ASA ROWE.

DRUGS, NURSIES, AND GARDENS.

1—The New Catalogues are now ready for distribution gratis, to those who supply post paid per mail. They contain the immense assortment of fruit and ornamental trees, shrubs and plants. Choice roses of 150 varieties, bulbous flower roots, splendid dahlias, green house plants, garden seeds, &c., all of which are priced at much reduced rates. A discount of 10 per cent. is made where cash or a draft on New York is sent with the order, as from all trouble of collection is saved. Orders per mail to Wm. R. PERCIE, will receive prompt attention, and be executed in a manner difficult to fail to give satisfaction, and will be forwarded as directed.

Also, for sale at very low rates and liberal credit, 160,000 Galleries of the choicest kinds for silk, comprising the new and old silks of 1841, and of French and Italian. At two of our green houses have to come down on account of street I will sell 5000 green house plants very low.

Flushing, (near New York), Sept. 1-11.

RATES OF UNCURRENT MONEY.

Specie,	per cent.	N. England Bank Notes,	per cent.
Eastern Drafts,	1 1/2	Indiana,	10 1/2
Western Drafts,	1 1/2	Illinois,	10 1/2
Ohio,	10 1/2	Kentucky,	10 1/2
Michigan,	10 1/2	Texas,	20 1/2
Maryland,	10 1/2	New Jersey,	10 1/2
Supper's Bridge,	10 1/2	Canada,	10 1/2

RECEIVED PRICES CURRENT.

THE NEW GENESSEE FARMER,	OCT. 1841.
WHEAT,.....	\$ 1.18 & 1.20
CORN,.....	56.....
OATS,.....	31.....
BARLEY,.....	56.....
RYE,.....	62 1/2.....
BEANS, White,.....	75.....
POTATOES,.....	31.....
APPLES, Desert,.....	28.....
FLOUR, Superfine, per bl.,.....	5.75.....
" Fine,.....	5.50.....
SALT,.....	1.38.....
PORK, Mess,.....	10.00.....
" Prime,.....	9.00.....
BEEF,.....per 100 lbs.....	3.50.....
EGGS,.....per dozen,.....	12.....
BUTTER, Fresh,.....per pound,.....	10.....
" Fresh,.....	10.....
CHEESE,.....	7.....
LARD,.....	6.....
TALLOW, Clear,.....	8.....
HIDES, Green,.....	5.....
PEARL ASHES,.....100 lbs.....	5.00.....
POT,.....	4.50.....
WOOL,.....pound,.....	30.....
HAY,.....ton,.....	12.00.....
GRASS SEED,.....bushel,.....	1.50.....
FLAX,.....	8 1/2.....
PLASTER, (in bbls) per ton,.....	6.00.....
" bulk (at Wheeland),.....	3.50.....

The Wheat market has been very fluctuating during the past month, owing principally to the variable accounts from England. First, news came that the weather was very unfavorable there, so that prices had materially advanced; consequently prices advanced here also. But later arrivals have brought intelligence that the weather had improved, and prices had declined; accordingly prices have declined here also. From our latest advice from England (Aug. 1) it is quite evident that the wheat crop in that country will not fall much if any below an average; so there was every prospect of its being secured in good order, and that it is not probable that very large orders will be sent for flour from that country, and we see no reason for anticipating much rise in the price of wheat or flour.

NEW YORK MARKET, Sept. 24.

Flour is a shade down, with a fair demand. Genesee has been sold at \$5.75 a bushel, though no large lots could be had under the bid. Old in round lots, fresh, sold at \$5.60. Southern Flour \$5.50 a bushel; a sale was made of 15 cts 24 taken in the ship. Jersey corn 1 1/2 cts bush. The receipts of Flour are a liberal sale; for this month, the quantity discharged from the Erie canal is greater than it was last year. The sales of Peas are \$5 per 100 pounds. Potatoes are \$2.25 a bushel. Sales of Flaxseed for crushing, at \$19.25 per ton. Wheat is again advanced, and now commands 1 1/2 cts 1/2, according to quality.

Cincinnati, Sept. 20.

Flour.—The Flour which arrived to-day was not for sale, and no sale has been made, and no large order has been taken. A few wagon loads have been sold at \$5.25 & \$5.30.

Wheat has again advanced and now commands 1 1/2 cts 1/2, according to quality.

Cleveland, Sept. 22.

The receipts of wheat to-day are near 25,000 bushels, and the market is very much depressed. Sales from boats of 100 bushels from Cleveland at 110 cents. 1100 bushels from Newcomerstown at 115 cents, and 1000 bushels from Massillon at 117 cents, are all that have come to our knowledge—300 bushels of corn sold at 7 cents. 200 bushels of flour "D. Adams" brand at \$6 from boat.

Detroit, Sept. 21.

Flour sold this morning at \$5.10. The news however, by the Great Western, knocked it down in the afternoon to \$4.75.

"Why is it that the love of flowers takes such deep hold of the heart?" Why! Why it is because they are the emblems of love. Show me one who does not feel his own heart expand as he watches the expanding beauties of some delicate flower, and you will show me one who knows nothing of that pure and perfect affection of the heart which binds the humanly together."

For the New Genesee Farmer.

Foot ail in Sheep.

Messrs. Editors:—Noticing an article in the last Genesee Farmer on the subject of *foot rot* in sheep, in which the writer says he has prevented the disease by paring off the under side of the hoof, I am induced to trouble you with a word on that subject.

I do not know but paring the hoof in the manner he suggests may be beneficial, but I doubt altogether that it produces the effect the writer supposes. I think he mistakes the nature of the disease; I do not consider it to originate in the ball of the foot—the part covered by the envelop which the writer would pare off, and of course do not believe, as he supposes, that the disease is generated by the filth collected in the foot, and procecd and retained there, by that part of the hoof which grows over the sole of the foot.

The disease commences between the claws of the foot, at the spot where the horn of the hoof unites with the flesh. At its commencement it exhibits the appearance of a slight inflammation as if chafed or scalded. The animal at this stage is slightly lame. It soon becomes a sore, with slight maturation, which is somewhat fetid. It now attracts the maggot-fly and is soon filled with maggots—unless destroyed, they consume shortly the entire ball of the foot. If the fore foot is diseased, being brought into contact with the side of the animal when in a lying posture, it deposits on the side some portion of the fetid discharge. This attracts the fly, and the side is soon alive with maggots, which eat through the body in a few days, thus causing the death of the animal.

Now I have no idea that the theory of the writer alluded to above is at all correct, nor that his remedy of paring the hoof is a preventive of the disease.

I suppose the disease originates in natural causes—that it is immediately induced by an acrid state of the fluids of the animal—that in certain seasons and locations it will prevail, and at other times will not; that the discharge from the large pore or sore which exists in the leg just above the parting of the claws being diseased and acrid, sends the flesh between the claws—which is always tender—the part becomes inflamed—a febrile maturation ensues—the fly is thus invited to his work, and I soon completes the mischief.—What may be the remote cause of the disease, is not certainly known; whether the wetness or dryness of the season, or the food of the animal, or some noxious or poisonous herbage may or may not be concerned in it, I cannot say any more than I can tell why the influenza or other epidemics should prevail at certain times and not in others, or why all the members of a family circumstanced alike, should not be alike affected by it.

The disease seems to be, with us, one of modern introduction. We have known it only a few years.—It is a calamity, and the part of wisdom is to discover its cause, if possible, so as to know how to apply preventives—in failure of this, to learn the nature of the disorder, so as to apply suitable and efficient remedies.

An opinion prevails, that it is infectious. I do not yet believe it is either contagious or infectious—either communicable by the presence of a diseased animal, or by matter deposited on the ground and received by a sound foot by treading thereon. I have no idea from observations hitherto made, that the disease is thus communicable. It is possible, I allow, and therefore I have for experiment, separated the diseased from the sound. But I have found no unexpected increase of new cases, when they have been all together, nor has there appeared to be any diminution of new cases when they have been separated. When the animal has been long confined to low moist ground, and the season has been wet, I have imagined this might be the originating cause. Again, when the season has

been uncommonly dry, as during the past summer, and the disease has prevailed, conclusive evidence is furnished that the character of the season in this respect is not the cause. At one time I have imagined that poverty of condition might bring it on, and at another time this opinion has been met by the fact that sheep fit for the butcher's stall have been equally affected with those that were poor and thin.

I have been conversant with sheep husbandry for many years, but have known nothing of this disease until within four or five years past. In reflecting on the subject, I can realize no difference in the care and management of my own flock between the last five years and any former period, except that formerly it was my practice to keep in their pasture, troughs *always supplied with salt*, protected by a rail over the top, supported by stakes, so that the animal could have access with the head to the salt, but could not get into it with the feet to soil and injure it. This practice has been neglected for a few seasons past, and salt has been fed out *occasionally* to the flock during the season. Whether this change has had any influence in causing or aiding the disease, I know not. I can, however, realize no difference in their circumstances for many years, except in this respect. Although we consider salt necessary for the health and comfort of the animal, and that nature will dictate just the amount needed when a supply is always at hand, still it is by no means certain that the want of such supply will cause or aid the disease—we can only say it is possible. If the theory is correct and reasonable that the local disease commences in an acrid discharge from the pore or issue above the foot, and if an unrestricted use of salt would have a favorable influence on the fluids and secretions of the animal, then perhaps its free use during the summer might prevent the appearance of the disorder.

This disease is not necessarily incurable or fatal but it is an inconvenient and troublesome malady and requires some labor and attention to subdue it.

As to the remedies. Lime—being a powerful antiseptic should be employed as a *preventive* and remedy in the first stages of the disease. Let the flock be made to pass through a small bed of lime once a week from the last of June until the first of September. Collect them into a stable or pen, and make it necessary in going out of it for them, to pass through a passage some three or four feet wide, and twelve or fifteen feet long, the floor or bottom of which being covered with finely slack lime, about four inches deep. It will enter between the claws, give healthy action to any small sore and correct any irritated discharge, thus preventing the invasion of the fly. In place of this, a little Blue Vitriol, finely powdered, and applied to the diseased part, will immediately dry up and heal the sore. If the foot is badly diseased, and maggots are present, pare the hoof so as to expose them and apply spirits of Turpentine which will instantly dissolve and soon destroy them—use a probe to be certain that they are all removed, and then apply the blue vitriol to the diseased part. As the foot in this case will be sore and tender for some days it will be necessary, in order to prevent a return of the fly until it becomes sound, to apply tar freely to the foot, extending the tar an inch or two on the leg above the hoof to prevent the fly effectually from approaching it. It will also be necessary to examine the hoof carefully once in three or four days until it becomes perfectly sound. I think much of the use of lime, as above suggested, both on account of its efficiency and the facility of its employment. I use for this purpose the common portable sheep rack in which hay is fed in winter, about twelve or fourteen feet long and two and a half wide. I nail to it a temporary bottom and put in the lime four inches deep, placing it before the

gate or door of the stable or pen in which the sheep are enclosed, and leaving the stable they pass in a few moments through this passage of lime. I recommend this practice urgently to farmers who either have the disease in their flocks, or who fear and dread it approach. I have made these suggestions, Mr. Editor in the hope of drawing the attention of farmers to the subject, that flocks hitherto sound, may, if possible be so preserved, and that those which are diseased may be restored and a recurrence of the disorder be prevented.

A FARMER.

Brighton, October 11, 1841.

Early and Late Fruit—Village of Aurora.

Lovers of fruits and flowers, and the early things the garden, were you ever at Aurora, on the eastern shore of Cayuga Lake? It is a quiet, unobtrusive village, where the rich live in great simplicity—the poor, with decent comfort. Here are green peas 1st June, ripe potatoes and apples in July; the most delicious plums and peaches in August; and, at that time, such high flavored clingstone peaches, grapes and apples, as few other places can boast.

'Tis said that when D. T. comes down from 1 sparkling Eden a Great Field two miles east; he catches eye at the precocious vegetation of this lake-ward spot with a sigh, not from envy, for his own present christianity rejects the feeling, 'tis only an emotion of regret, that Flora and Pomona could not thus propitiated at his more elevated location.

I have often heard it said that yenchies did thrive on a clay soil, but here are the best practices the world, growing in great variety, on a hard calcareous clay relieved by stable manure alone. Trees are never pruned, the soil around them is kept loose and entirely clear from grass and weeds.

Reader, if you never saw a village where fences and locks were unnecessary to protect the fruits and flowers from biped depredation go to Aurora: Here I fell Pippins, Pound Sweets, and Brush's Nonpareil lying in heaps—all who run may eat with impunity the balance is fed to the cattle.

It has been said that a poor man cannot live in Aurora, but the following anecdote will show that a peasant's widow is of quite a different opinion. A few years since, a laboring man of this village removed with his family to Ludman, where he afterwards died of a congestive fever, leaving his wife and children destitute. The shrewd widow immediately wrote to her former neighbors at Aurora, soliciting charity; the result was that a purse was made up for her relief, which was remitted to her by mail; when the widow opened the letter, she held up the *several bills* to the astonished gaze of the long Housers, saying there was more where that came from, and that every dollar of this, should be expended in paying her passage, and that of her child back to Aurora. She did come back in the cheerful month of November, but so far from finding a cold reception, the rest of one half her sufferings, sufficient to unlock every female heart in the village; a generous contribution took place, one furnished a bed, and chairs, a third a table, knives, forks, &c. &c. The widow and her little ones are now the comfortable, industrious poor ones of Aurora, who are poor in comparison with the general thrif which surrounds them.

Here is an Academy well endowed, and what better, cheaply and thoroughly conducted. A stranger would almost imagine himself at times in a first steam boat, or on board of a man of war; so of both late and early, does the bell strike, summon the classes to recitation. 'Tis said that the only punishment the principal inflicts on a dull idle pupil, is recommending him to go where he will be required to study less.

are an Episcopal and a Presbyterian, and they are not well supported; there are always too many proselytizers in the camp among the rich; God more generously sheds the comforts of his religion on the heavily burdened, causing him to reject the privilege of the tabernacle, "where the face of the man is beneath that of his friend."

There are lawyers here, but they are not carnivorous. The resident physician Lova minute for her self, fair self, and science for the good it has done to medicine, not for the benefit which medicine has conferred on science, as some of our latter day lights would have us believe.

One of the pent up city, who live where the struggle, yet Heaven-protected flower in Paccioli's prison, takes no root; where puny infancy—the pallid adolescence, the premature decay of riper age, the violation of nature's laws; if you want to slip to corporation taxes, breathe a pure air, your own vegetables, fruits and flowers, feed your own cow and keep a pig, without being classed your neighbors among the unfashionable, go to Iowa.

S. W.

Catleton, October 2, 1881.

An Important Discovery in Agriculture.

The following article from the N. Y. Evening Post is some new, and if true, very important discovery in wheat growing. There appears to be much similarity in the arguments, but for various reasons we are inclined to think the account is somewhat exaggerated. Still, it is well worth some experiments, and we have no doubt many of our readers will test matters for themselves next season.

In the *Palangue*, a *Furior* paper published at Paris, M. Shi, a novel discovery is described, which, it will work a great change in an important department of agricultural labor. It is communicated to Paris print, by Carthé Paillet, and M. B. Riard, due their letter at Brest, August, 1881. It appears that while they and some of their friends, who in their own estates, were engaged in conversation the subject of agriculture, it was observed by one of them, that that branch of industry was suffering from the want of capital and enterprise, than that which was to be done without more, which was every day becoming more scarce and expensive. This remark led to an inquiry into properties of manure, and particularly as to what nature had made in those uncultivated places, where there seems to be a vigorous and luxuriant growth, without artificial assistance.

In observing nature unassisted, or unwarped, or by the hand of man, in vegetable reproduction, it is found that when the seed is ripe it fills upon the land, and then the plant which has produced it detests leaves, or falls itself upon it, in decay, and thus and protects it from the weather, until germination has commenced, and the young plant is able to grow up in health and strength, and full development, recommencing the same routine of seedling and of reproduction.

From this it follows that, in nature, every plant produces its own soil or *humus*, and that the earth serves to bear the plant, and not to feed or nourish it in vegetation. The nourishment of plants is supposed to be derived from air and water, heat and light, or electricity, in different proportions, adapted to the different varieties of vegetable nature. With this general notion in their minds, and concerning wheat to be, in present circumstances, one of the most important vegetable substances, they decided to try experiments, and in October last, undertook the following operations:

In a field which had been sown with rye, because the land was deemed too poor for wheat, a plot of 12 square yards, unutilized and left without manure, was carefully sown over with the grains of wheat, and the straw was laid upon it closely and about one inch in thickness. In a garden, also, which had been neglected several years, a few square yards of earth were trodden over, and the surface being made close and hard, some grains of wheat were scattered on this arched surface, and a layer of straw one inch in depth, was carefully laid over it and left, as in the former case, to take its chance without ulterior attention. And, in order to make doubt impossible con-

firming the mere secondary functions of mineral earth in vegetable reproduction, twenty grains of wheat were sown upon the surface of a pane of glass and covered with some straw alone, as in the other case.

The germination of the seed was soon apparent and most healthy in development. "The water has been rigorous," says these correspondents, "for this part of the country, and the earth has sometimes been frozen in one solid mass to a depth of six inches in the garden where the wheat was sown, and this has happened several times during the winter, to the great surprise of many farmers, and even the entire destruction of some, while the spots protected by the straw were never thoroughly encased, nor were the grains of wheat, though lying on the surface under the straw at all affected by the cold. During spring excessive droughts prolonged, and several times repeated, have prevented vegetation on the common plan from flourishing in healthy progress, while our little spots of wheat have hardly felt the inconvenience of excessive dryness, for the earth protected by the straw has never been deprived entirely of moisture, and our blades of corn were flourishing, when all round was drooping and uncertain. To conclude then, we have thoroughly succeeded in our practical experiment, and the great value of the discovery, and of the finest quality. The straw was more than six feet high, and in the ears were 53, 63, and even 80 grains of wheat of full development, the admiration of all who saw them, and particularly those which grew upon the pane of glass, and which were quite as healthy and as large as those which grew upon the common earth. It must be observed also that there was not the smallest particle of earth up in the glass, and that the plants were left entirely to themselves, without being watered or attended to in any way whatever, from the time of sowing to the time of reaping.

The cause of this success, they think, may be explained in the following manner:

"Straw being a solid conductor of heat, and a good conductor of electricity, maintains the root of the plant in a medium temperature, and prevents the earth from being deprived entirely of moisture. The moisture of the earth or the substratum, being continual, facilitates the gradual and constant absorption of carbonic acid gas from the surrounding atmosphere, and hydrogen and carbon, the chief elements of nourishment to vegetables, are thus economized in regular supplies where they are constantly required, and pass into combination with oxygen from the roots up to the stems and branches of the plants in which they are assimilated, and the oxygen throws off in exhalation from the leaves. The straw decays but slowly, and thus furnishes its substance by degrees to the plant in due progress on and proportion, (such as the stalk) so that the decomposition of the straw corresponds to the four phases of fermentation in progressing from the *saccharine* to the *alcoholic* acid and the *putrid* stage, analogous to those of *infancy*, *childhood*, *youth*, and *senility* of the plant.

"We observe that our blades of wheat have but a very few roots, and these are short and hard, something like a bird's claw; and this agrees with the remarks of M. Raspail, who states that the most healthy plants in ordinary vegetation have the least exuberance of roots and fibres.

"Another important observation, also, is, that weeds and parasitical vegetation are prevented by this method, for the straw chokes every other plant but that of its own seed. Many other interesting observations might be made on these experiments, but we refrain, at present, from burdening on your readers; but if any of them wish for further information on this subject, we shall willingly afford them every facility. The importance of the general result will easily become apparent without further comment, and a revolution in the present modes of agricultural labor is a necessary consequence of this discovery. No tillage will now be required, nor any artificial stimulants in manure and other more or less expensive combinations with regard to soil and culture. In fact, it would be tedious to enumerate the various advantages that may result in practice from this experimental, and therefore, we proclaim it simply to the world that all may profit by it."

As this experiment can be easily tried, we hope some of our farmers will put it to the test, and communicate the result. We shall certainly try it on a small seven by nine lot of ground, which is the largest that is vouchsafed to a dweller in the city.

Culture of Silk.

It is indeed "an ill wind that blows nobody any good." The subsidence of the Mulberry speculation is followed by cheering attention to the manufacture

of silk. The immense quantity of trees lately propagated for speculation, essentially aids those who now embark with a view of pursuing the Silk Culture as a steady business. The vice of speculation is thus rendered tributary to honest industry; and we confidently predict that the crop of silk, in three or four years, will prove that, whatever evils may have deluged the country through the speculating mania, the "mulberry fever" is followed by healthy and efficient action in the gratification of rendering our country independent of foreign nations for an ample supply of silk.

We congratulate thousands of thrifty farmers upon the pleasant and profitable employment which the silk business affords to the families and children in their families—affording means and inducements for industry, that may essentially save these families throughout life—promoting comfort and independence, and yielding returns that would guard against pecuniary distress, should the ordinary means of support be curtailed by the loss of husband or father, or by other reverses in fortune.

R.

Ontario County Agricultural Fair and Cattle Show.

It was our intention to have attended this exhibition, but having been denied that privilege, we copy an account of the proceedings from the *Ontario Repository*, by which it will be seen that the right spirit was manifested, as usual, in that noble county:

The annual Fair and Cattle Show of the Ontario County Agricultural Society, was held in this village on the 12th instant. Notwithstanding the unfavorable weather the day previous, and on the morning of the Fair, there was by far the largest collection of people ever assembled in the county. The number has been variously estimated at from five to ten thousand.

A spirit of enthusiasm seemed to animate the immense crowd, alike creditable to the members of the society and propitious to the cause of agriculture in our country. It was, on the whole, a proud day for the Farmers of "Old Ontario." The exhibition was graced by a large collection and variety of the best specimens from their fields and gardens, as well as of their useful animals and domestic manufactures.

[The list of premiums will be found in another column.]

At 1 o'clock P. M., as many as could crowd the spacious court room not perceptibly diminishing the numerous throng in our arena, assembled there, and listened to an interesting address from Geo. Willson, Esq., which, we believe, is to be published.

After Mr. Willson had delivered his address, on motion of Timothy Buel, jr. of East Bloomfield, it was unanimously resolved, that the thanks of the members of the society be tendered Mr. Willson for the interesting address, and that he be requested to furnish a copy for publication.

The members of the Society then proceeded to the choice of officers for the ensuing year, when the following gentlemen were chosen:

JOHN GRIGG, of Canandaigua, President.
Charles Godfrey, of Seneca, 1st Vice President.
Hemen Chapin, of East Bloomfield, 2d do.
Peter Mitchell, of Manchester, 3d do.
Joseph Fellows, of Geneva, 4th do.
William Otley, of Phelps, 5th do.
Joseph Garlinghouse, of Richmond, 6th do.
Wm. W. Gorham, of Canandaigua, Recording Secretary.

Oliver Phelps, of Canandaigua, Corresponding Secretary.

James D. Bemis, of Canandaigua, Treasurer.

TOWN MANAGERS OR COMMITTEES.

Canandaigua—Wm. Burling, jr., Charles Sheperd, Jacob Smith, Elizabeth Townsend, Henry Howard.

Canadice—Hiram Colegrove, Frederick Westbrook, Robert Armstrong, Sylvester Austin, Josiah Jackman.

East Bloomfield.—Timothy Buel, jr., Theodora Sprague, Myron Adams, Benj. Bradley, Flavins J. Brown.

West Bloomfield.—Reynold Peck, Robert Worthington, Bezael C. Tait, Jasper C. Peck, Otis Thompson.

Bristol—Francis Mason, Erasmus H. Crow, Anson Packard, Wm. T. Coddington, Phineas Kent.

South Bristol—James Farnely, Jr., Sauti Collins, John Stetson, Allen Brown, Franklin Crooker.

Gorham—David Pickett, Ephraim Blodgett, Nathaniel Smith, Hiram Harkness, Collier Meritt.

Hopewell—Cyrus Gates, Andrew M. Bush, Eben Benham 2d, Theodore Crosby, Ephraim Watkins.

Manchester—Nicholas Howland, Abner Barlow, Jr., Edmund B. Dewey, Manning Redfield, Jedediah Dewey, Jr.

Naples—James L. Monier, Bronson K. Lyon, Alanson Watkins, Ephraim W. Cleveland, Josiah Porter.

Farmington—Russell M. Rush, Joseph C. Hathaway, Wilmarth Smith, Percz Hathaway, Welcome W. Herendeen.

Richmond—Hiram Pitts, Noah Ashley, Edward Swan, Zachariah Longway, William P. Reed.

Phelps—Elias Scott, William Post, Spencer Hildreth, Wm. Dickinson, Charles Scott.

Seneca—Phineas Prouty, John Devereux, George Fordon, Abraham A. Post.

Victor—Jared H. Boughton, Wm. D. Dickinson, Thomas Embury, Samuel Rawson, Henry Pardee.

The President then read the reports of the several committees.

LIST OF PREMIUMS AWARDED BY THE ONTARIO AGRICULTURAL SOCIETY, at the Fair held on Tuesday the 12th of October, 1811:

HORSES.

Best Stud Horse kept in the county 6 months preceding the Exhibition, \$7, to F. W. Dickey, of the town of Phelps.

31 best do \$3, to A. C. Baile, Phelps.

Best Stud Horse over 4 years old, raised in the county, \$7, to John Post, Seneca.

2d best do \$5, to Benj. Wensburn, Gorham.

31 best do \$3, to Samuel Scott, do.

Best pair matched Horses, not over 7 years old, \$7, to Marvin Gage, of Gorham.

2d best do \$5, to W. W. Herendeen, Farmington.

3d best do \$3, to Charles Godfrey, Seneca.

Best single Horse, not over 7 years old, \$5, to Samuel Greenleaf, Canandaigua.

2d best do \$3, to Jos. Garlinghouse, Richmond.

Best Mare with Colt 1 year old past, \$5, to Ephraim Watkins, Hopewell.

2d best do \$3, to Wm. Outley, Phelps.

3d best do \$2, to Nathaniel Smith, Gorham.

Best 3 year old colt, \$5, to A. M. Bush, Hopewell.

2d best do \$3, to Samuel Remond, Canandaigua.

Best 2 year old colt, \$3, to J. Wolcott.

2d best do \$2, George Gooding, Bristol.

CATTLE.

Best Bull, \$7, to Tim. W. Gooding, Canandaigua.

2d best do \$5, to J. C. Hathaway, Farmington.

3d best do \$3, to B. Thomas, Canandaigua.

Best pair 3 year old steers, \$5, to W. W. Herendeen, Farmington.

2d best do \$3, to Myron Adams, East Bloomfield.

3d best do \$2, to Lemuel Bannister, Jr., Phelps.

Best pair 2 year old steers \$5, to Harvey Pratt, Hopewell.

2d best do \$3, to J. S. Jones, East Bloomfield.

3d best do \$2, to Silas Harris, do.

Best pair of 1 year old steers, \$5, to Seymour Reed, Bristol.

2d best do \$3, to Danforth Booth, Manchester.

3d best do \$2, to S. P. Harvey, West Bloomfield.

Best 1 year old heifer, \$5, to Robert Higham, Canandaigua.

2d best do \$3, to Thomas Bell, Gorham.

3d best do \$2, to Anson Packard, Bristol.

Best Milch cow, \$5, to E. Hale Canandaigua.

2d best do \$3, to Herman Chapin, East Bloomfield.

3d best do \$2, to J. C. Hathaway, Farmington.

Best Bull calf, \$5, to Tim. W. Gooding, Canandaigua.

2d best do \$3, to Herman Chapin, East Bloomfield.

3d best do \$2, to J. C. Hathaway, Farmington.

Best heifer calf, \$5, to Anson Packard, Bristol.

2d best do \$3, to J. C. Hathaway, Farmington.

3d best do \$2, to " " "

Best pair of Working Oxen, \$7, to James Sears, Seneca.

2d best do \$5, to O. Morse, Canandaigua.

3d best do \$3, to P. J. Bronson, East Bloomfield.

SWINE.

Best Ram, reference to carcass, \$5, to Geo. Cayward Jr., Hopewell.

2d best do, reference to carcass, \$3, to Guy Collins, East Bloomfield.

Best Ram, reference to fleece, \$5, to W. B. Dickerson, Victor.

2d best do \$3, to Jared Hathaway, Farmington.

Best 6 Ewes, reference to carcass, \$5, to C. B. Meek, Canandaigua.

2d best do \$3, to George Cayward, Seneca.

Best 6 Ewes, reference to fleece, \$5, to Jared Hathaway, Farmington.

SWINE.

Best single Swine, \$5, to H. Hubbard, Canandaigua.

2d best do \$3, to Anson Carter, East Bloomfield.

3d best do \$2, to E. Humphrey, " "

Best Sow, \$5, to John Jones, Canandaigua.

2d best do \$3, to Anson Carter, East Bloomfield.

3d best do \$2, to J. S. Hart, Hopewell.

Best Litter of Pigs, \$5, to F. A. Spaulding, East Bloomfield.

2d best do \$3, to John Jones, Canandaigua.

3d best do \$2, to James D. Bemis, Canandaigua.

PLOUGHING.

Ploughing with horse team, $\frac{1}{4}$ of an acre, to be within an hour, \$7, to William Butler, Canandaigua.

2d best do \$5, to Charles Godfrey, Seneca.

3d best do \$3, to Collier Miller, Gorham.

Ploughing with ox team $\frac{1}{4}$ of an acre, best within an hour, \$7, to George Hewson, Seneca.

2d best do \$5, to A. Jones, East Bloomfield.

3d best do \$3, to Daniel Parsall, Canandaigua.

DOMESTIC MANUFACTURES.

Best 10 yards of Cassimere, \$5, to N. P. Brewster, Farmington.

2d best do \$3, to M. Norton, Farmington.

Best 50 lbs Butter, \$5, to Parz Hathaway, Farmington.

2d best do \$3, to Thomas Bell, Gorham.

3d best do \$2, to Burt Bandy, East Bloomfield.

Best 20 yds Flannel, \$5, to Edward B. Dewey, Manchester.

2d best do \$3, to Thayer Gauss, East Bloomfield.

3d best do \$2, to William Outley, Phelps.

Best 20 yds Carpet, \$5, to John Lapham, Farmington.

2d best do \$3, to Franklin Beebe, East Bloomfield.

3d best do \$2, to A. B. Rapahje, Farmington.

Best 20 yards of Woolen Cloth, \$5, to E. B. Dewey, Manchester.

2d best do \$3, to William Bryant, Manchester.

3d best do \$2, to William Outley, Phelps.

Best 100 lbs Cheese, \$5, to Uri Bench, East Bloomfield.

2d best do \$3, to John Lapham, Farmington.

3d best do \$2, to F. Hathaway, Bristol.

Greatest quantity of reeled Silk \$5, to A. Hathaway, Bristol.

Next do do \$3, to M. Newton, East Bloomfield.

Next do do \$2, to A. N. Buck, Manchester.

Best 5 pounds Cocoons, \$5, to Jonathan Baell, East Bloomfield.

2d best do \$3, to A. Hathaway, Bristol.

3d best do \$2, to H. Munson, East Bloomfield.

Best ounce Black Sewing Silk, \$5, to Walter Whitney, Hopewell.

2d best do \$3, to Jos T. Shaw, Canandaigua.

3d best do \$2, to William Blodgett, Gorham.

Best ounce Sewing Silk, assorted colors, \$5, to Walter Whitney, Hopewell.

2d best do \$3, to H. Munson, East Bloomfield.

3d best do \$2, to W. Blodgett, Gorham.

DISCRETIONARY PREMIUMS.

3 Shaws 3 dolls to Justus H. Sanger, Canandaigua;

1 do 1 doll to E. B. Dewey, Manchester; 1 Lamp

Stand 1 doll to Burt Bandy, East Bloomfield; 1

Red Silk Coverlid, 2 dolls to Charles Scott, Phelps;

4 blue and white Coverlids, 2 dolls to William Outley,

Phelps; 1 red do 1 doll to T. Palmer, Gorham; 1 blue

do 1 doll to W. Outley, Phelps; 1 plated Brass Stove

Cap, 1 doll to S. W. Gregory, Canandaigua; 1 Lace

Veil, 1 doll to Thomas Bell, Gorham; For Stocking

Yarn 1 doll to F. Penoyer, East Bloomfield; 1 Green

Heard Rug 2 dollars, to Mrs Hannah Salsman; For

blue and white Mittens, 1 doll to Frederick Penoyer,

East Bloomfield; For fancy doll doll to ———;

For Hearty Rug red and black, 1 doll William Bryant,

Manchester; For black Stockings 50 cts to W. Whitney,

Hopewell; For White do 50 cts to W. C. dey, Phelps; For blue and white Coverlid, 1 doll to A. B. Rapahje, Farmington.

Niagara, Cayuga, Livingston, and several other County Reports, were received too late to be noticed this month.

Cayuga County.

The first annual Fair of the Cayuga County Agricultural Society was held at Auburn, Oct. 13th and 14th. The Auburn Journal says—"There was fine display of cattle, horses, sheep and swine presented for competition on the first day; and on the 2nd a goodly variety of the products of horticulture, vegetables and fruits of the garden and orchard; as well as domestic manufactured goods of wool, silk and cotton. The result so far, has been highly gratifying to the friends of the most important interest of the country—Agriculture—as it has shown conclusively that Cayuga is little behind the best counties of the state in the true sources of wealth."

We intended to publish the complete list of premiums, but find our space will not permit.

The Committee on Silk reported that the best specimen of Cocoons was presented by Mr. Joseph C. Wood, of Montezuma, and the premium of \$2 was awarded to him. There was also presented by A. Fitch, and H. Polhemus, two lots of sewing silk of superior quality, manufactured in the State Prison. "The silk is equal to any Italian silk now in use. The opinion of the committee is that the growing of silk might be made profitable."

David Thomas, Chairman of the Committee on Fruits, remarked, that "considering the pleasure with which our citizens receive a present of fine fruit the Committee are not a little surprised at the indifference and neglect manifested in the cultivation of the superior varieties."

Great crop of Corn.—"The committee on grain awarded to Joseph F. Osborn, the first premium of \$5 for the best crop of corn, pressed by specimens, but in quality of seed and quantity produced, which is 14 bushels 15 pounds to the acre.

The second premium of \$5 for quantity, (121 bushels 15 lbs to the acre,) was awarded to James Sheehan, of Springfield. The seed we conceive not of the best kind."

We should feel obliged if some friend would render us a particular account of these corn crops—soil, culture, kind, mode of measurement, &c.—Eds.

Cortland County.

The third annual Fair of this Society was held at Cortland Village on the 5th ult. The Democrat says—"The day was uncommonly clear and pleasant, and the display of animals was larger and far finer than any preceding occasion." Judging from the published report we should think that the number and amount of premiums offered were entirely too small to excite spirited competition; but we presume this will be improved hereafter. We observe that our friend Col. H. S. Randall, the worthy Corresponding Secretary of the State Society, carries off the palm most kinds of Cattle and fine woolled sheep:

Great Yield of Corn—Close Planting.

A Scotch farmer residing in the town of South Wayne county, N. Y., informs us that he raised, in past season, 400 bushels of Indian Corn on 4 acres land, notwithstanding the dryness of the season. He attributes his success mainly to his manner of planting, and thinks that farmers generally plant too thickly. His mode is, to plant in rows 3 feet apart, and drop two grains in a place only 15 inches apart in the rows. The variety used is the Red Blazed Elm. The soil is sandy loam, and 100 loads of manure were put on the 4 acres. The corn was ripe and cut sufficiently early to sow the ground with wheat.

AN OBJECT OF AMBITION.—It may not be in your power to excel many people in riches, honors, or abilities; but you may excel thousands in goodness of heart. Hitherto you may have been. It is an able worthy of it.

Genesee County Agricultural Fair.

This exhibition was held at Alexander on the 13th and 14th ult. We were not able to be present on the first day, but were informed that the display of cattle was very good, and gave evidence of considerable improvement. On the second day the cattle had mostly left, but we noticed a fine lot of grade animals of different breeds belonging to the Messrs. Heston, one of which are very beautiful. The large herd of improved Short Horns belonging to Peter A. Renssen, &c., we also witnessed with great pleasure. We were informed that Mr. Renssen had some fine cattle, but are by no means prepared to see so large a number of such excellence. We hope to give a more particular account of them hereafter.

The Ploughing Match excited a good deal of interest, as usual; but the work was performed in too much haste to be done well. We would advise the farmers hereafter to offer premiums for those who perform the work in the best manner within a given time.

The exhibition of Domestic Manufactures &c. was equal to our expectations, or very creditable to the operatives of Genesee, although a few families deserve great praise. We noticed, in particular, a very large assortment of useful and elegant articles exhibited by Mrs. Worden Mattison, of Darien, consisting of silk gloves and hose, sewing silk, linen thread and a work, domestic cloth and linen diaper, the whole affording a greater display of skill and industry than is often produced by one family. Other articles deserve to be noticed, but our space will not allow us to enumerate them.

From what we saw of this Fair, we are constrained to say we were disappointed with Old Genesee. — This rich agricultural county is capable of doing better things, and ought to be one of the very foremost in the march of improvement. We were greatly surprised when the President of the Society informed that they had not raised a sufficient amount to be able to draw their full quota of funds from the State. This fact alone affords conclusive evidence that something is wrong; and the officers will have to put forth all efforts to awaken interest in the subject.

We have no desire to dictate, but from what we have seen we are fully satisfied that Alexander is not the most suitable place for holding the Fair, and one of the best towns in the county refuse to co-operate because they are held there. It appears to us there are many reasons in favor of holding the Fair at Batavia. In the first place we believe the citizens of that place would contribute liberally towards the funds of the Society, and with the co-operation of the rich northern and Eastern towns which now keep aloof, we would be little difficultly in raising at least a sufficient amount to secure the full portion of State aid. — We are aware that some of the Southern towns might be aggrieved, but if we are correctly informed there are but few of them that have heretofore rendered such assistance, so that but little would be lost in that direction. Besides, Batavia is the centre of business and attractions, has excellent accommodations and is easy of access. So that a much larger attendance would always be secured there than at Alexander. We presume the officers of the Society will consider this matter, and that such arrangements will be made for the coming year as will redound to the credit of this Empire county.

For the New Genesee Farmer.

GENTS.—I send you a brief notice of the proceedings of the Genesee County Agricultural Society, at the second annual Exhibition and Fair, held on the 13th and 14th of October, 1841.

The show of cattle and horses was very fine, being largely gained over last year's Exhibition. The show

of sheep and hogs, was very slim, and a great falling off from last year. It was far from creditable to so large a county, and will probably be remedied at our next Fair.

The Mechanics seem to have taken little or no interest in our meeting. Premiums were offered for almost every kind of mechanical production, but there were only a very few kinds exhibited.

The household arts were, if possible, still worse represented, and the Ladies of old Genesee have much to answer for in allowing themselves to be so poorly represented. I feel confident it will not be so again.

On the second day the ploughing match came off, and was by far the most exciting part of the whole exhibition. The ground to be ploughed was one eighth of an acre, and the premium to be awarded to the person doing it the best in the shortest time. The ground selected was a pasture on the flats. Four teams entered at first, and their performances were as follows:—1st, 13 minutes 50 seconds, 2d, 14 m. 25 sec., 3d, 14 m. 35 sec., 4th, 16 m. 20. The second took the premium. The team and plough were owned by L. E. Heston, ploughman, Mr. Brownell.—Had all the ploughs been equal to Mr. Heston's it would have been a very close contest. The plough is manufactured by Smith & Co., at Batavia, and is called the "Scotch Improvement." It is a decided improvement, upon the ploughs of this county at least, and must prove a great acquisition. There is no farm implement of more importance than the plough, and yet there is almost as much improvement to be made, as there was from the old bull plough to the one now in use. Two other teams entered subsequently, and did the same quantity, in 12 minutes and 10 seconds, and 13 m. 35 seconds.

I think the arrangements for the ploughing match were defective, inasmuch as it should have been the best within a reasonable time, say 25 or 30 minutes. It would then enable weaker and lighter teams to compete, as it would not be so much time as workmanship, and that after all is the true test of good ploughing, time being only a secondary object. I hope such will be the order next year.

There was also a defect in the arrangement relative to the cattle. No person should be allowed to exhibit cattle unless each animal is tied to a stake.

The speeches should also be made the first day, and the premiums awarded and paid the second day.

All these things will be made right after a little more experience, and farmers must not complain if the management of the Society is not perfect the second year.

I am sorry to say that there is not as much spirit manifested by the farmers as there ought to be, nor have they come forward as liberally as every person had reason to suppose they would. There was a large concourse of people, but nothing when compared with the assemblage in other counties. I regret exceedingly that we were not able to draw from the state all the money to which the county was entitled. We have not received our portion into sixty-one dollars. It does not tell very well for the "Empire County," that out of its 7,000 farmers, there could not be found enough to raise the sum of \$179 00. The premiums will all be paid, but still it would have been much better if there could have been something in the treasury for another year.

It was resolved to keep the two counties, Genesee and Wyoming together as one society, and officers were elected the same as though the county had not been divided.

Premiums Awarded.

BULLS.

Devonshire, M. Vernon, T. G. Goodwill, E. P. Beck, 2 premiums. Durham: B. Murphy, P. A. Renssen, 2 premiums. Best Bull of any age con-

mon or crossed, C. Carter, Durham, out of native Devonshire, got by Weddel's imported Young Laver. This bull shows in an eminent degree, the great superiority of a cross with good Durham. Z. Cone and L. E. Heston each drew premiums in this class.

OXEN AND STEERS.

P. A. Renssen, L. Fisher, S. W. Kingsley, L. E. Heston, and C. Tompkins.

COWS AND HEIFERS.

P. A. Renssen, 2 premiums, J. Heston, and E. Stevens. Devonshire; E. P. Beck, 4 premiums.

COMMON OR CROSSED.

W. E. Heston, D. Malory, and L. E. Heston.

HORSES.

J. Jenne, C. Barrett, S. W. Kingsley, B. Benedict, H. Dunham, S. H. King, L. E. Heston, and C. Barrett.

HOGS.

E. P. Beck, E. J. Felibone, H. Brown, and L. E. Heston.

SHEEP.

George Shapman, C. Hannum, 2; E. P. Beck, 2.

FIELD PRODUCTS.

H. Brainard, best acre of Corn, 97 bushels—best acre of Potatoes, 400 bushels—best 3 acres of Spring Wheat, 27 bushels, per acre. Mr. Brainard had no competitor.

DOMESTIC ARTS.

E. Scramton, for Reeled Silk, E. Bishop, Flannel; E. Murdock, Sewing Silk; E. Byington, Woollen Yarn; Mrs. W. Mattison, Silk Hose; Z. Cone, 25 lbs. Butter; Mrs. T. Riddle, Carpet; Levi Hall, Saddle; T. Yates, Fine Boots; W. Sillery, Ladies' Walking Shoes and Slippers each.

DISCRETIONARY PREMIUMS.

The following discretionary premiums were awarded:—

An Ottoman made by Miss Matilda Butler, Alexander, \$1—Hat, manufactured by P. Durant, Batavia, \$1 50—Work Bag Miss Sarah Jenne, Bethany, \$1—Linen Lace Cap, Linen figured Tablecloth, Linen Thread, a fine specimen of Sewing Silk, and Cocones, by Mrs. and Miss Mattison, of Darien, \$4—25 lbs. Maple Sugar, very fine by Mr. Mattison, \$1—Woollen Rob Roy Shawl, manufactured entirely by Miss Farnham, Alexander, \$2—Beautiful specimen of Reeled Silk by N. D. Hart, \$2—Elegant Hearth Rug, Mrs. E. G. Spalding, Alexander, \$1 50—Gig Harness, double work Harness, travelling Trunk, Valise and Carpet Bag, by Wm. Manly, Batavia, \$5—Very fine specimen of Penmanship, by A. S. Pratt, Alexander, \$1—Very excellent article of Leather, by Wm. Geer, Alexander, \$2—On a number of Fowls raised by Mrs. Palmer, of Attica, called the Top Knots, which were very fine, \$3.

OFFICERS FOR ENSUING YEAR.

President, T. C. Peters, Darien; Vice Presidents, E. Bishop, Attica; L. DeWolf, Middlebury; John Jenne, Bethany; H. Rameadell, Batavia; C. Rich, Alexander; E. P. Beck, A. Sheldon, R. Rich, LeRoy; P. Dickey, Elba. C. P. Turner of Batavia, Recording Secretary. P. Follett of same place, Corresponding Secretary, L. E. Heston of Batavia, Treasurer.

I had intended to have made some remarks on the different breeds of cattle, but this article has been so much longer than I expected that I shall reserve them for a future number.

Yours &c.,

Darica, October 16, 1841.

T. C. P.

Premium Ploughs.

In justice to the manufacturers, we remark, that the plough which gained the first premium at the ploughing match in this county, was the Whiting plough, made by A. J. Langworthy, of this city; and the one which gained the second premium was the improved Livingston county Plough, made at Caledonia.

Monroe County Agricultural Fair.

The annual exhibition of this Society came off in this city on the 15th and 16th of October. The display of animals, of every class, was better than we anticipated, although we felt quite sure old Monroe would do himself credit. Indeed we do not believe any county in the State has had as good an exhibition this season as Monroe. Some persons remarked that the cattle show was not equal to that of last year; but when they consider that a number of the finest animals exhibited last year, belonged to adjoining counties, we think they will admit that this county was better represented than last season. In sheep and hogs especially, we noticed a very great improvement. The breeds are better, more numerous and distinct, and the number of specimens greater and of finer quality.

The Ploughing Match excited much interest, as was evident from the thousands of farmers and citizens who thronged the ground to witness it. Twelve teams, with skillful ploughmen, entered for the contest, and nobly did they all perform their work. The rapidity and ease with which single teams turned over an old tough sward, was a pleasing sight, and spoke volumes in praise of both ploughs and ploughmen.

The exhibition of Horticultural productions, implements, domestic manufacture, &c., was quite respectable, but did not fully meet our wishes or expectations. We do not believe there is any lack of industry or skill among the farmers wives and daughters of Monroe, but there seems to be much unwillingness to exhibit specimens of their work; owing to diffidence or an apprehension that it will be excelled.—This is a wrong feeling, and one which we hope hereafter to see done away.

It gives us peculiar pleasure to observe the very general attendance of farmers and their families at these exhibitions. At all places which we have seen or heard from, the Agricultural Fairs are most numerous attended. Who can estimate the amount of benefit that will result to the country, from the information which the thousands of Wealth Producers have obtained at these exhibitions? What farmer can sit alone of them without learning some valuable lesson in husbandry, or without forming some new resolutions and plans for improvement.

We regret to notice a disposition, on the part of some, to find fault with the decisions of the Committees in awarding the premiums. Those who serve in this capacity have a least an arduous and thankless task, and after performing it with faithfulness and integrity, according to the best of their ability, it is unkind in the extreme to charge them with unfairness. Suppose they do occasionally err in judgment, and a premium is awarded where it should not be what great harm is done? Is the gaining of a few dollars in premiums the great object which exhibitors have in view? We know they will spurn the idea.—Their object is, or should be, to aid on the cause of improvement; and, although it is natural for every man to think highly of his own cattle or productions, all should remember that the owner is poorly qualified to be an impartial judge of his own property; and a disinterested Committee are not half so likely to be mistaken as the owner.

The reports of the various Committees render it unnecessary for us to prolong our remarks; but we cannot close without expressing a desire that all will read the excellent address of Mr. Smith, which may be found in our columns this month.

Premiums Awarded by the Monroe Co. Agricultural Society for 1841.

HORSES.

The Committee on horses remarked that they were governed more by the appearance and action of

the animals than by any reference to their blood or pedigree. After careful examination and comparison of the numerous fine horses exhibited, they agreed to award premiums to the following, as those which according to the best of their judgment appeared to combine the most of those qualities requisite for use, *fulness, durability and elegance.*

For the best Suid Horse, (Imported Horse)	
Alfred, (Thomas Weddle)	\$10 00
2d do., J. K. Balentine	5 00
3d do., Wm. T. One	5 00
Best Pair Matched Horses, G. F. Eck	
2d do., A. Love	5 00
3d do., H. Olmsted	3 00
Best Mare, John Ayrault	
2d do., Wm. T. One	5 00
3d do., Wm. Balentine	3 00
Best 3 years old Colt, (by Alfred) H. Pad	
2d do., (by Alfred) H. Fellows	5 00
3d do., (by Alfred) H. Fellows	3 00

HERON BROWN, } Committee
CHS. D. GODFREY, }
HARRY OLMSTED, }

CATTLE.

The Committee on cattle report that owing to the large number of superior animals exhibited, they found it difficult in some cases to decide which was entitled to the greatest merit; but after mature deliberation, and the exercise of their best judgment, they decided to award premiums as follows.

For the best Bull, (Durham Short Horned,	
American Comet, Thomas Weddle	\$10 00
2d do., Ramsdell & Cole	7 00
3d do., Albion, Wm. C. Cornell	5 00
Best Pair 3 years old Steers, John Ayrault	
2d do., Stephen Leggett	5 00
Best Pair of Fatted Oxen, John Ayrault	
2d do., John Bradley	7 00
Best Pair of Working Oxen, John Ayrault	
2d do., John Leggett	5 00
3d do., Gideon Ramsdell	3 00
Best Milch Cow, (Durham Short Horned	
Gazelle, Thomas Weddle	7 00
2d do., Wm. C. Cornell	5 00
3d do.,—Smith	3 00
GEORGE SHEFFER, } Committee.	
JACOB STRAWN, }	
JOHN BURNS, }	

SWINE.

The Committee on Swine remarked that the exhibition of this class of animals was highly creditable to the Society and the county. Many very beautiful hogs, besides those for which premiums were awarded, deserve special notice. Among these was a sow with six pigs, Byfield and Leicester, owned by John Putnam of Greece; three fine young Leicester sows, owned by Matthias Garret of Gates; three beautiful young sows and one boar, pure Berkshire, owned by George Whitney of Rochester; a very superior Berkshire boar pig, four months old, owned by Charles Merchant of Greece, and a sow with six pigs, Russian and Leicester, owned by Harry Olmsted of Greece.

For the best Boar, (Berkshire) Isaac Moore	
2d do., Nathaniel Hynard	\$7 00
3d do., Amos Sawyer, (Berkshire)	3 00
Best Sow, (with pigs, Leicester), T. Watson	
2d do., Amos Sawyer	5 00
3d do., Amos Sawyer	3 00
GIDEON RAMSDSELL, } Committee.	
JOHN FULLER, }	
EDWARD CHAMFENEY, }	

SHEEP.

The Committee on Sheep report that they discharged their duties with all the care and faithfulness of which they were capable. For the honor of the county, and particularly for that of the farmers owning the numerous beautiful animals exhibited on the occasion, the Committee take pride in saying they were all very choice and desirable lots of sheep. Besides those for which premiums were awarded the Committee desire to mention as worthy of special notice, a small lot of Merino Ewes, owned by Eliphaz Day, of Ogden, and of Merino Bucks, owned by his son; also some Merino Bucks, owned by Gideon Cobb of Brighton.—Premiums were awarded as follows.

For the best Buck, reference to carcasses,	
(Leicester,) Simon Lewis	\$5 00
2d do., John Betteger	5 00
Best for Fleeces, Mills Landon	
2d do., Jesse Harrison	5 00
Best 3 Ewes, reference to carcasses, (Cotswold),	
Wm. C. Cornell	5 00
2d do., (Southdown), J. Hargrave	3 00
Best 3 Ewes, reference to fleeces, Mr. Lys	
2d do., Mr. Snyder	5 00
Best 3 Lambs, (Cotswold), Wm. C. Cornell	
2d do., John Betteger	5 00
Best 3 fatted sheep, Wm. C. Cornell	
2d do., Simon Lewis	5 00

THOMAS WILLCOX, } Commit
JOHN ROBINSON, }
ARTHUR CLARK, }

FIELD CROPS.

The Committee on Field Crops, respectfully request that they have attended to applications for premiums, in this department, from the following Gentlemen who have, by evidence satisfactory to the Committee, established their claims to the honor having raised upon their respective farms the following products, viz:

WHEAT.

James Beatty of Greece, an average of 53 bu and 29 lbs to the acre—6 acres.
George Shaffer, of Wheatland, an average of bushels—74 acres.
Samuel Shacolt, of Chili, an average of 25½ bushels—9 acres.

CORN.

Robert D. Marlin, of Chili, an average of 94 bushels to the acre.
Ebenzer Gooding, of Henrietta, an average of 90 bushels to the acre.
Lynen B. Langworthy, of Greece, an average of 80 1-32 bushels to the acre.
James Hart, of Sweden, at the rate of 96 bu to the acre on one acre and a half.
Abram Cushman, without vouchers, present memorandum, showing 18 bushels to the acre.

POTATOES.

Owen McGuire, of Greece 340 bushels to the acre
George S. Eff, 312 bushels to the acre.
Samuel Davidson, of Greece, 280 bushels to the acre.
Ebenzer Gooding of Henrietta, 247 bushels to the acre.

F. P. Root, of Sweden, 1200 bushels to the acre.
George Sheffer, 653 bushels Carrots to the acre.
" " 1000 bushels Mangel Wurtzel
" " 1160 bushels of Sugar Beet
" " 552 bushels of Ruta Baga
Charles Filer, Carrots at the rate of 720 bushels to the acre, which being short of the prescribed measure cannot claim a premium.

The Committee, in accordance with the above have awarded

WHEAT.

To James Beatty, Esq., of Greece, the first premium \$10—quantity 53,29 1-2 bushels to the acre.
George Sheffer, Esq., of Wheatland, 2d do \$7—quantity 74 bushels to the acre.
Samuel Shacolt, Esq., of Chili, 3d do \$5—quantity 25 1-2 bushels to the acre.

CORN.

Robert D. Marlin, Chili, first premium, quantity 94 bushels to the acre. Ebenzer Gooding of Henrietta, 2d do. \$5—50 do. L. B. Langworthy, 3d do. \$2—80 1-32 do.

POTATOES.

Owen McGuire, Greece, first premium, \$5—quantity 340 bushels to the acre. George Shaffer, Wheatland, 2d do. \$5—312 do. Samuel Davidson, G 3d do., \$2—280 do.

ROOTS.

F. P. Root, Sweden, first premium, on Baga, \$5—quantity, 1200 bushels to the acre. Sheffer, first premium on Mangel Wurtzel, 1000 do. Do. do. Sugar Beet, \$5—1160 do.

The season having been an unfavorable one for production of large crops, the competition for premiums has necessarily been confined to a small number. These, however, it is thought, do no discredit to specimens exhibited, to the soil or culture of Monroe.

Little regard has been paid, by many of the exhibitors, to the rules prescribed for certifying to the Committee, the necessary facts in regard

measure of the land and the mode of ascertaining the product, and the Committee have rejected, in one or two instances, applicants who doubtless might have aimed premiums but for this neglect. The important duty of furnishing a description of soil mode of culture, expense, &c. has been neglected by several of the applicants—they have however promised to supply this defect in all cases where premiums are awarded. The Committee would respectfully recommend that all who may be disposed to contend for premiums hereafter, procure in due time the proper directions in regard to these particulars.

LEWIS BROOKS, }
NICHOLAS REED, } Committee.
ELISHA HARMON, Jr. }

(Account of the mode of cultivation, soil &c. of the premium crops will be published hereafter.—Eus.)

FLOUGHING MATCH.

The committee on ploughing, report that twelve 'horse' teams entered the field for competition. The contest was very spirited, and was witnessed by a large concourse of spectators. The work was mostly performed in good style, and the committee were highly gratified at the display of skill in this important art. Besides those to whom premiums were awarded, the committee would mention that Mr. Robinson and Mr. Critenden, of Henrietta, deserve much praise for their skillful ploughmanship. The premiums were awarded as follows:

First Premium to Simon Lewis, of Brighton, ... \$7
Second do. Edward Howell, Chili, ... 5
Third do. Chs. Burr, Portanton, ... 3
R. HARMON, Jr.,
Chairman of Committee.

IMPLEMENTS.

The Committee to whom was referred the examination of farm implements, &c., report that the number of articles presented for their inspection, was very small, and does not reflect much credit on the manufacturers in this county, who it is well known are second to but few in this business. Some meritorious articles were exhibited without competition, and therefore are not entered to premiums. (Hatch's Sowing Machine was exhibited, in operation, during the Fair, and elicited great praise, but as it was not present at the time of inspection, the Committee omitted to report on it.) They decided to award premiums as follows.

To Andrew J. Langworthy, for the "Locklin Plough," it being considered the best green-sward Plough, ... \$5
To P. D. Wright, for the Geneva Plough, considered the best for stubble or cross ploughing, ... 3
To A. & J. Wedd, for the Agriculturist's Furnace, a very useful article for heating water or boiling food for animals, a discretionary premium of, ... 3
To A. J. Langworthy, for an exhibition of various cast iron horticultural implements converted into a table iron, a discretionary premium of 3
MARTIN SAGE, }
ABEL BALDWIN, } Committee.
I. B. LANGWORTHY, }

BUTTER, CHEESE &c.

The number of competitors in this class was not large, but the articles exhibited were of very excellent quality. The Committee awarded premiums as follows.

For the best Butter, to David Frost of Carthage, ... \$3
Second do., Jacob Strawn, Chili, ... 2
Best Cheese, Alfred Fitch, Riga, ... 3
Second do., Wm. Sternberg, Henrietta, ... 2
Maple Sugar, Alfred Fitch, Riga, ... 2

CALEB K. HOBBS, }
N. B. MERRICK, } Committee.
H. E. ROCHESTER, }

On Silk, and other Domestic Manufactures.

In this department there was quite an interesting exhibition, although the number and variety of articles were too small to reflect much credit on the housewives and daughters of the farmers of Monroe. The

committee have omitted to notice some articles, owing to the want of competition, and others from want of merit. Some of those for which premiums were awarded, were deserving of the highest praise. The committee award to

Mrs. A. Goodell, for the best sewing silk, ... \$3
Mrs. Hiram Robbins, for 2d do., ... 2
Miss Eliza Bingham, for best silk hose and other articles, ... 3
Mrs. Theodore Backus, for 2d do., ... 2
Miss Lucina Goodrich, for 2 very handsome black shawls, ... 2
Mrs. Lyman Potter, for two fine pieces of carpet, and a beautiful hearth rug, ... 2
M. P. PARKER, }
ALEX. KELSEY, } Com-
MATTHIAS GARRET, } mit-

HORTICULTURE.

The Committee on Horticulture report that the display of Fruit, Vegetables and Flowers was very respectable, and in some respects extraordinary, considering the lateness and unfavorableness of the season. The Apples, Grapes, and Quinces were very fine and abundant. But the most conspicuous and beautiful object in this department was a large and splendid pyramid of Dahlias, from Alexander Kelsey, Esq., consisting of about forty varieties of blooms, the colors very beautifully arranged. A table of elegant green house plants, and several large bouquets of Dahlias and other cut flowers, from Messrs. Ellwanger & Barry, also added much to the beauty of the exhibition. The garden vegetables were mostly of fine quality, but the competitors were not as numerous as they should be. Premiums were awarded as follows.

O. Hamford, best doz. Apples, ... \$1 00
H. Colby, " Pears, ... 1 00
S. W. Lay, (discretionary) Peas, ... 1 00
Matthias Garret, best Plums, ... 1 00
L. B. Lanworthy, best Peaches, ... 1 00
Z. Burr, " Quinces, ... 1 00
Do., " Grapes, ... 2 00
M. Garret, 2d " " ... 1 00
Mr. Donnelly, " Muskmelons, ... 2 00
Wm. Webb, " Watermelons, ... 2 00
Alfred Fitch, " Squashes, ... 2 00
J. A. Young, (discretionary) Pumpkin and Squashes, ... 1 00
A. L. Jones, best Egg Plants, ... 2 00
T. Van Hamilton " Beets, ... 1 00
T. Backus " Carrots, ... 1 00
Wm. Webb, " Turnips, ... 1 00
Z. Burr, " Turnips, ... 1 00
Wm. Webb, " Salsify, ... 1 00
Simon Seiler, " Cabbage, ... 1 00
Wm. Hamilton " Onions, ... 1 00
Alex. Kelsey, " Dbl. Dahlias, nest, ... 5 00
Ellwanger & Barry, 2d best, do. do., ... 2 00
Do., best cut Flowers, nest, ... 2 00
Do. 2d do. do., ... 2 00

M. B. BATEHAM, }
H. M. WARD, } Committee.
N. GOODSELL, }

Erie County Agricultural Society.

Premiums awarded by the Erie County Agricultural Society, at their Fair and Cattle Show, held in Buffalo, on the 6th Oct. 1841:

HONORS.
1st Stallion, Stephen Osborn, Clarence, ... \$10
2d do. Bushnell Strong, Buffalo, ... 6
1st Mare and colt, Sam'l Hudson, Sardinia, ... 10
2d do. do. Aaron Gould, Hamburg, ... 6

[The Committee noticed with great pleasure, the fine display of matched horses belonging to Jacob S. & Charles Miller, of Buffalo. Finer could no where be shown in the State.]

CATTLE.

1st full blooded Bull, L. F. Allen, Black Rock, ... \$6
2d do. do. Warren Granger, do., ... 4
3d do. do. A. & J. McArthur, do., ... 3
1st mixed do. George Bruce, Lancaster, ... 5
2d do. do. Jos'h Hutchinson, Amherst, ... 3
3d do. do. J. D. Van Allen, Blk Rock, ... 2
1st 2 yr. Dm'm do. Amos Chilliott, Hamburg, ... 3
2d do. do. do. Orlando Allen, Black Rock, ... 2

1st do. Devon do. Aaron Gould, Hamburg, ... 3
1st common Bull, Aaron Parker, Hamburg, ... 6
1st yearling do. John Webster, ... 10
1st young working Oxen, John Collins, Blk Rock, ... 2
2d do. do. do. Jesse Vaughan, Cheektowaga, ... 7
1st 3 yr. Steers, South Salisbury, Hamburgh, ... 6
2d do. do. Chumney Abbott, " ... 4
1st full blooded Cow, L. F. Allen, Black Rock, ... 6
1st mixed Durham Cow, Sylvester Chamberlain, Buffalo, ... 4
1st mixed Devonshire Cow, Aaron Gould, Hamburgh, ... 4
1st common Cow, Alex. Hitecock, Cheektowaga, ... 6
2d do. do. Peter Curtis, Buffalo, ... 4
1st 2 year old Durham Heifer, William S. Reese, Evans, ... 4
1st common Heifer, Peter Curtis, Buffalo, ... 3
1st yearling Dur'm Heifer, Orlando Allen, Buffalo, ... 3
1st do. common do. Joseph Clary, Buffalo, ... 3
1st mixed Calf, Wm. Hambleton, Hamburgh, ... 3
2d do. do. Warren Granger, Black Rock, ... 2

HOES.

1st Berkshire Boar, A. B. Allen, Black Rock, ... 8
2d do. do. Manuel Henshaw, Hamburgh, ... 5
1st Sow and 6 Pigs, A. B. Allen, Black Rock, ... 6
2d Sow and 5 Pigs, Lewis Eaton, " ... 4
1st Sow, A. B. Allen, Black Rock, ... 5
2d do. A. B. Allen, Black Rock, ... 3

SHEEP.

1st fine woolled Buck, Arnold Green, Lancaster, ... 5
1st South Down do. Wm. Bullock, Evans, ... 5
1st Leicester Buck, Charles W. Nason, Hamburgh, ... 5
1st blb Leicester Buck, Jas. Becknell, Aurora, ... 5
1st 6 South Down Ewes, W. M. Parker, Lancaster ... 5
1st 6 Leicester Ewes, Chas. W. Nason, Hamburgh, ... 5

FARM CROPS.

1st 43 acres Wheat, A. & J. McArthur, B. Rock, ... 5
1st 2 acres Barley, Jesse Vaughan, Cheektowaga, ... 4
1st 2 acres Corn, Moses Case, Alden, ... 4
1st 1/2 acre Carrots, Lewis Eaton, Black Rock, ... 3
1st 1/2 acre Ruta Baga, Lewis Eaton, B. Rock, ... 3
1st 1/2 acre Sugar Beet, A. Dekey, Black Rock, ... 3
2d 1/2 do. do. R. L. Allen, Black Rock, ... 2

BUTTER, CHEESE, ETC.

1st 25 lbs. Butter, Aaron Parker, Hamburgh, ... 3
2d 25 lbs. do. Jesse Vaughan, Cheektowaga, ... 2
1st 10 lbs. Honey, John Webster, Hamburgh, ... 2
2d 10 lbs. do. L. F. Allen, Black Rock, ... 1
1st 5 bush. Winter Apples, Lewis Eaton, B. Rock, ... 2
1st 5 do. Fall do. Benj. Hodge, Blk Rock, ... 2

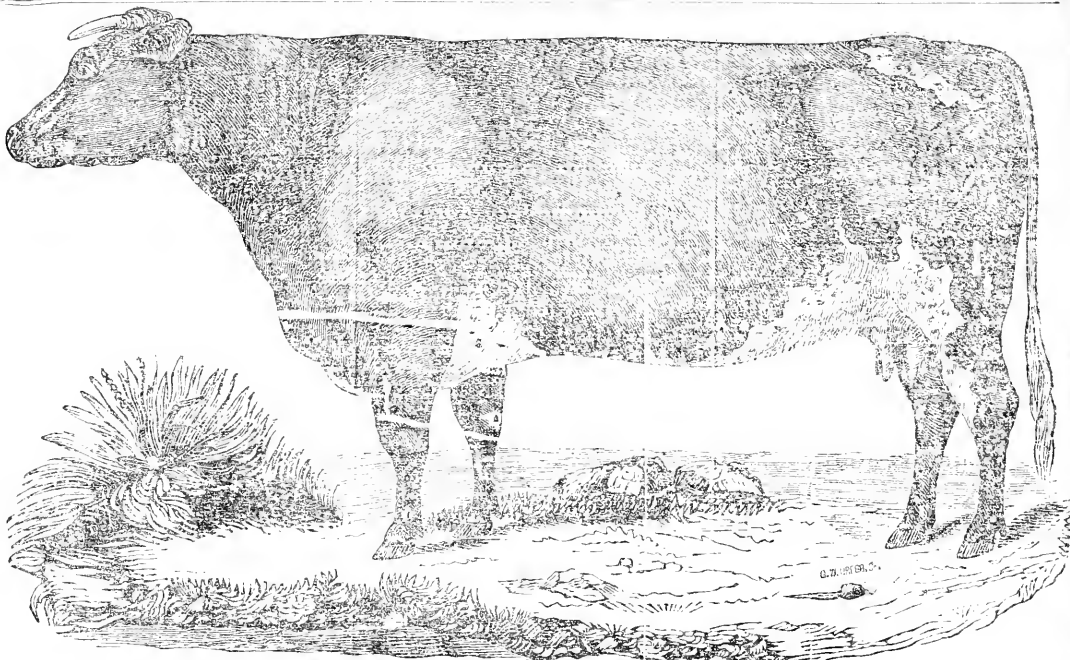
HOUSEHOLD MANUFACTURES.

1st piece Flannel, Ira McColl, Aurora, ... 4
2d do. do. H. S. Turner, " ... 2
1st Woolen Blankets, Moses Case, Alden, ... 4
1st Counterpane, Lucy Foster, Hamburgh, ... 3
2d do. do. Aaron Parker, do. ... 2
1st Woolen Shawl, Cynthia Paine, Aurora, ... 3
2d do. do. Aaron Parker, Hamburgh, ... 2
1st pair Women's Woolen Stockings, do. do. ... 1
1st pair Women's Worsted Stockings, H. S. Turner, Aurora, ... 1
1st pair Men's Woolen Stockings, W. L. Parker, Lancaster, ... 1
1st do. Woolen Mittens, Miss E. Henshaw, Hamburgh, ... 2
1st 1st Cosings, Henry P. Russell, Black Rock, ... 2
2d do. do. Harvey Clark, Lancaster, ... 1

MISCELLANEOUS.

1st—Mott's agricultural Store and esuldron, Dudley & Thompson, Buffalo, ... 3
1st—Plough, Joseph H. Smith, Buffalo, ... 3
The following articles would each have received a first premium, had they not been excluded by the rules of the Society, as not being among the advertised list of premiums, viz:
A beautiful worked lace veil, by Miss Wakely, of Lancaster.
An elegant worsted worked Bell Rope, by Miss Johnson, Buffalo.
A superior patent Lock, manufactured by J. W. Devock, Buffalo.
A pair of superior Woolen Blankets, from the factory of Hitecock & Durick, Buffalo.
WARREN, BRYANT,
Recording Secretary.

THE MECHANICS' FAIR in this city commenced on the 12th and continued open till the 15th ult. The exhibition was highly interesting and was attended by a large number of visitors. More about it hereafter.



DURHAM SHORT HORN COW "GYPSEY."

The property of William Fuller, Esq., Shantectels.

GYPSEY is from the herd of the late S. Van Rensselaer, Esq.; is seven years old, past. She proves herself valuable for stock. Mr. Fuller has bred three half calves from her in three years, and all of them promise to make fine animals. She is remarkably easy kept, thrives readily and is a very good handler. It is no known how much milk she would give through a season, as she has always suckled her calves. Mr. Fuller's mode of raising them is, to let them run in the pasture with the cow, the first summer, then treat them the same as the rest of his stock.

(The above drawing was taken at the Syracuse Fair, and is believed to be very correct. Mr. Fuller has not had an opportunity to inspect it.—Ers.)

Mr. Allen's Importations of Stock.

Mr. A. B. Allen paid us a short visit a few days since, on his way home from England. He has been very successful in the purchase and importation of some very superior animals. The first shipment was per packet ship Mediator, and consisted of Berksh swine of very large size. One of these "stood three feet high, of great length, and would fatten to weigh about 200 lbs." Another shipment was per packet ship Wellington; and last a general assortment accompanied by himself, per the Hendrick Hudson, embracing some very large ewine of the Yorkshire and Kentworth breeds, which, it is stated in the Farmer's Journal, will fatten to weigh 1600 lbs., but Mr. Allen thinks the maximum about 1300. (Large enough in all conscience, and we think Mr. A. can now satisfy even the Kentuckians.)

[From the New York Commercial Advertiser.]

IMPORTED STOCK.—We are happy to announce the return from England of our friend A. B. Allen, Esq., of Buffalo, who has visited Great Britain upon an agricultural tour, and inspected all the principal herds of the Kingdom. Perhaps no one who could have done this to better advantage. Mr. Allen has long been devoted to the breeding of cattle, and has raised some beautiful Durhams and pigs, such as we have never seen surpassed. He now brings home from his excursion a large collection of South Downs, Yorkshire, Kentworth and Berkshire pigs, Shepard's dogs, Dorking fowls, English pheasants, &c. He has under his care, some valuable sheep, worth \$500 per head, for Mr. Stevenson, Bishop Meade, of Va., and F. Rotch, Esq., of Oswego co., N. Y. Mr. Rotch's lamb is a South Down, only six months old, and weighs 152 lbs. It is indeed an acquisition to our stock, and we doubt not will be a source of profit to the importer. Mr. A. came a passenger in the Hen-

drick Hudson, Captain Morgan. The last named gentleman brought out a very fine Durham cow for his own farm on the Connecticut.

Oneida County.

The Cattle Show and Fair of this county, was held at Hampton, on the 20th and 21st ult. The *Roman Citizen* says respecting it, "although the weather was unfavorable, the extent of the exhibition exceeded all expectation, and the village of Hampton was filled to overflowing in every nook and corner. It has exceeded all our most zealous friends had dared to hope—and it has, forever, we trust, put to silence the evil forebodings of those, who have prophesied evil of this Association, designed to do so much good to the Farmers and Mechanics of this county. The display of working Cattle, Cows, young Cattle, Sheep and Swine, was very fine. In the Dairy Department, Oneida has done her duty. The samples of Butter and Cheese, were such as to challenge competition. In Domestic Fabrics, there was a sad deficiency but we trust it will not be so another year.

There were many fine horses exhibited, though great improvement is needed in breed of horses, and some matched and draught horses, as well as Studs, and breeding Mares, were of the choicest description. The amount of premiums paid, was \$614."

The report on Field Crops, we deem valuable for the purpose of comparison:

"To Elisha Pettibone of Vernon, best acre of winter wheat, 37½ bushels, sample exhibited of the very best quality, \$15 00; Julius Curtis, Westmoreland, best acre of corn 21 bushels 36 lbs. \$15 60, the corn was excellent from sample. Elisha Shaw, Rome, 21 best acre corn, 23 bushels, 16, very good corn, \$8 60,

Nathanial S. Wright, Vernon, best acre of oats, 10 bushels, 3 pecks, \$15 00; Jay Pettibone, Vernon best acre barley, 50 bush. 5 lbs. \$10 00. Benjamin P. Johnson, Rome, best half acre potatoes, (Silver Lake) quality and quantity considered, 166 bushels \$10 00. James Finney, best half acre quantity alone, 192 bushels, \$10 00.

Lynnan Stoddard, Westmoreland—2d best ½ acre—as to quantity—178 bushels, \$5 00; Benjamin P. Johnson, Rome—Best ½ acre Rut Bage—213 bushels, \$10 00.

The officers regretted that they were obliged to exclude the crop of Corn of Stephen Scott of Lee which yielded 97 bushels and 40 lbs. to the acre—and the crop of Oats of Elizer C. Burton of Lee, which yielded 24 bushels 20 lbs. per acre."

Omission.

The mark (†) was omitted in two places where it ought to appear in our last. The first is the article on *The Pear Tree* p. 147 and the next is *Driving Nails into Hard Wood*, at p. 159.

Died.—The Canadian Farmer and Mechanic which we noticed last month is said to have died—from want of care and nourishment.

New Genesee Farmer.

We doubt whether there is any thing of which the "Empire State" has more occasion to be proud, than of its Agricultural Literature. The Cultivator at Albany, and the Genesee Farmer at Rochester, are both noble repositories of agricultural science, and with their immense circulation, must have a mighty influence on the farming interests of that and the neighboring States. As their successive numbers come before us, we cannot but admire the richness of their contents, nor forbear reflecting on the beneficial results, that must flow from such an extensive diffusion of agricultural knowledge.—*Maine Temperance Gazette.*



ROCHESTER, NOVEMBER, 1811.

To Readers and Correspondents.

Several communications are unavoidably deferred this month, in order to make room for the reports of Fairs &c. We trust however, that this number of our paper will not be found deficient in interest, even to our most distant readers.

The second communication of C. P. T. "on the importance and utility of the dissemination of knowledge among Farmers," is received, and shall have a place in our next. The author informs us that a want of time prevented him from furnishing it several months ago, as was intended.

The Pens received from Chas. E. Norton, So. Berwick, Maine, are called Knight's Tall Honey Pens; they are the best variety known for the table, but grow so tall as to make them objectionable to many.

The specimen of Wild Pea from A. A. Burnham, Esq., Colburn, is the *Lathyrus crenatus* of botanists. It is not often, though occasionally, found in these parts. The flowers are quite ornamental, resembling the Sweet Pea of the gardens, to which it is nearly allied.

S. C. is informed that we know of no process by which good wine can be made from the native Frost Trapes.

"Monroe," and some others who wish to draw us into an endless Chess controversy, shall receive attention next month.

Trial of Ploughs at Syracuse.

The late trial of ploughs at Syracuse, under the direction of the State Committee, it was reasonably expected, would be attended with most important results. When it is considered that the yearly cost of ploughing in the State, amounts to millions, it becomes evidently a matter of no small magnitude, if that cost can be diminished one third or one half.

In offering a few remarks on that trial, it may be well to state, that the writer, although of the Committee, was unavoidably absent when the decision and report were made, which he has not seen, consequently no other of the Committee is responsible for anything here said.

That the trial was unsatisfactory, none can deny. The failure of the Committee to meet previously, and make necessary arrangements, caused a confusion at the time of the trial, which alone would have prevented complete success. Most of the members of the Committee who were present, were appointed to fill vacancies on that day, and consequently had no time to inform themselves of any particulars relating to the subject. Suitable ground had not been selected, and its unevenness rendered the strength for draught so constantly varying that it was impossible to determine it accurately. The Dynamometer was very imperfect, though exhibiting with some accuracy the relative draught of each plough. Only one kind of soil was tried, which was so much drier than is usual in ploughing, that it was not a fair test of the operation generally. The Committee had full opportunity to examine the construction and operation of each plough, so far as it could be done by a single trial in dry sward, and that their decision is not far from the truth, is to be taken for granted. We do not much if a finer collection of ploughs or even as fine a one, was ever be-

fore seen. The improvement in one year alone, has been very great. And we hope that the unsuccessful competitors will not be discouraged in presenting their ploughs again next year, when it is hoped a fuller trial may be made. It was to be regretted that some ploughs entered, were, in consequence of the rain and confusion, not tried, among which were an excellent plough from Stephens Cook of Onondaga county, and the celebrated Howard plough, from M. B. Bledman of Rochester.*

One of the ploughs was rough from the furnace, some had the mouldboards painted, some were well scoured by use, and others were even ground sharp at the point; all of which tends to vary the result.

As the object always in pointing out errors is to avoid them in future, the writer respectfully suggests the following points, among others, to be observed in future trials.

1. Let suitable ground be selected beforehand; it would be better to pay a sum of money for its use, than to have that which is bad. One field should be clayey, another medium loam, and another sand; a part sward, a part stubble, and a part recently ploughed and harrowed. Let it be the most even and uniform that can be found, for the trial of the dynamometer. The ploughs may be tried on rough or stony ground without this instrument.

2. Every plough should be scoured bright by previous use, and have no additional preparation by grinding or otherwise.

3. The relative force exerted in ploughing different widths and depths by the same as well as by different ploughs, should be carefully measured by the dynamometer. Especially the force required in cutting through, and below, the grass roots in green sward, and in running so deep as to lift the subsoil; and the comparative friction on long and short mouldboards, in light, and in adhesive soils.

4. The quantity of the work done by each is to be particularly noted.

5. One ploughman, and one team should be used for the whole. If one of the Committee be the ploughman, all the better.

6. It is of the MOST VITAL IMPORTANCE, that the trial be not made on the days of the annual fair. To attend properly to all the above particulars, two or three hours are the very least that could in any wise be in justice bestowed on each plough; more time would be desirable. If fifteen ploughs were entered, as was the case this year, several days would necessarily be spent in their proper examination. Some other time should therefore be taken, and an agreement be previously made with the members of the Committee, to be faithfully at all times on the spot, which they would doubtless be willing to do, for the sake of securing a full, faithful, and indisputable decision, on the merits of this king of instruments in agriculture.

* Great credit should be given to Moores and Stacer, proprietors of "Barnaby and Moores' side-hill and level land plough," for their persevering experiments with the dynamometer, to determine the form for the most easy draft for a good mould-board, with other improvements.

If any apology is necessary for the length and somewhat too scientific nature of the following article, we think the importance of the subject in relation to the wheat growing interests is a sufficient one.—Eus.

From the Albany Cultivator. The Hessian Fly and other Wheat Insects.

EXPLANATION OF THE ENGRAVING.

1.—Wheat stalk with the larva of the Hessian fly deposited—three of the stalks punctured by the Ichneumon, *Ceraphron*—natural size, 3 20ths of an inch.

2.—A larva and pupa.

3.—A section of the wheat stalk, with the larva magnified.

4.—Larva advanced to the pupa state, magnified.

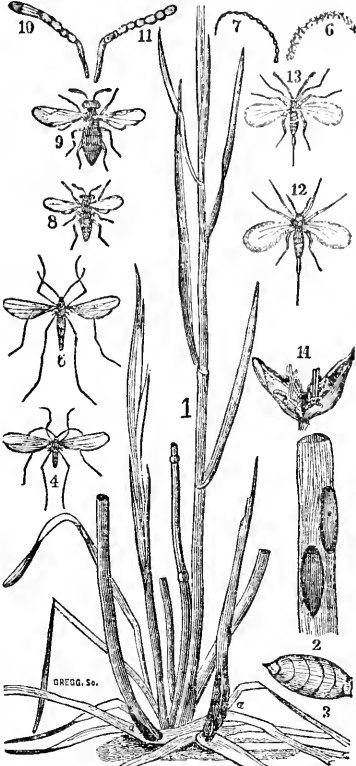
4, 5.—Male and female Hessian fly, *Cecidomyia destructor*, magnified—6 antenna of the female.—7 antenna of the male.

8, 9.—Male and female Ichneumon, *Ceraphron* de

structor, magnified.—10 antenna of the male.—11 antenna of the female.

12, 13.—Male and Female wheat worm fly, *Cecidomyia triticea* of Kirby, magnified.

11.—Section of a grain of wheat with the young wheat worm within it magnified.



There is, perhaps, no period of our agricultural history, wherein the ravages of the Hessian fly have attracted more attention than during this season; the memorial to Congress of the individual who professes to have discovered a remedy, and who is asking for a compensation; the reference of this memorial to the Committee on Agriculture at the very moment that efforts are making to establish a National Society; the observations of MARGARETTA MORRIS, attracting the attention of so many eminent men and so many acute observers, joined to the extent of the insect's depredations, and to the advancement of agricultural science in all its departments, except entomology, have combined to attract this attention. Among other contested questions, arising out of the discussion, is the identity of this destructive race, *Cecidomyia destructor* of Kirby with the wheat worm of New England, the *Cecidomyia triticea* of the same author. The circumstance of the great Linnaeus making but one species, under the name of *Tipula triticea*, is itself a strong indication of their identity. Whether future investigations will enable us to restore the system and the nomenclature of this great Swedish naturalist, time alone is to determine. I frankly acknowledge that I dislike innovations upon such perfect systems, and think, as the Hibernian would say, that the two insects are identical; but while we should frown upon all attempts by men of science to introduce new names for the purpose of extending their own pretended discoveries, we should be equally disposed to encourage accurate investigation into the true character, habits, transformations and operations of insects; "The sacred sons of vengeance, on whose course Corrosive famine waits, and kills the year." Having recently returned from a visit through a wheat country where its ravages have been recently felt, and found that farmers have many more words than ideas in getting it; that there is much more to

in their views, some calling it "the insect," without ever thinking or inquiring whether there are two; others describing what is unquestionably the Hessian fly under the name of the "wheat worm," without knowing whether the worm became an insect, and some vice versa; while some are ignorant enough, and they are no very limited number, to confound it with a coleopterous insect of the beetle tribe, known at the south as the wood-borer, which infests the grain and the bark.—I have wished myself entomologist enough to describe this detestable or deplorable; and let future inquirers tell whether the descriptions can be so reconciled as to make them either generic or identical, but as I am not, and like all other men are prejudiced in favor of my own opinions, the attempt will only be an approximation to the truth. It is necessary only to remark that the Hessian fly, (*Cecidomyia destructor* of Kirby,) is the only one known south of latitude 40°.

It is a singular fact, tending to the establishment of the affirmative of the question, that the Hessian fly and the wheat worm in the same stage of their existence, are reared upon by a parasitic insect of the order *Hymenoptera*, (four winged,) belonging to the genus *Ceraphron* of Latreille:—"This is frequently taken for the wheat fly or Hessian fly, from the circumstance of its being frequently found in vast numbers during the devastations committed by that insect, and many have been deceived by the peculiar circumstance of its evolution from the pupa of the Hessian fly under their own eye;" when in truth it is the only protector we have from the total destruction of our wheat by the rapid increase of the fly, and belongs to that vast class of insects, included by Linnaeus under the name of Ichneumon; this insect deposits her eggs in the larva of the Hessian fly, through a puncture made by her acute ovipositor in the stem of the wheat; and this puncture has given rise to the opinion, and in fact furnished the whole ground for it, that the Hessian fly pierces the wheat stalk for the purpose of depositing its egg in the manner I have endeavored to delineate in the above figure, when it is the inviolable evidence of the destruction of the fly, and of the birth of its deadliest foe; and is indeed a wonderful display of that instinctive faculty by which the genus *Ceraphron* is enabled to find the true place of deposit, where her young, protected by the inflexible covering of the fly in its pupa or flax seed state, feels securely until the latter is hatched. If the weather happens to be unfavorable to this operation at the proper period, the following season is always a dreadful one to the wheat grower, as the fly upon an average has about eight or ten young, whose ravages over the whole face of the wheat growing region are commensurate with their increased numbers.

In the British Farmer's Magazine, vol. 3, p. 493, we are told that the larva of the *Cecidomyia tritici*, the acknowledged wheat fly of New-England, are preyed upon by the *Ceraphron*, an Ichneumon fly, which deposits its eggs in the body of the larva of the wheat fly. "I could not determine," says the very accurate author of that article, "whether it actually deposits its egg in the maggot or body; but there can be no doubt of the Ichneumon piercing the maggot with a sting; as it is probable the fly delights to destroy the maggots, as well as to deposit eggs in their bodies." We shall see presently that the use of the words *larva* and *maggot* in the above extract, indicate strongly, that if the writer has not the Hessian fly before him, he has any thing but the wheat worm of New-England; and he uses the terms "*Cecidomyia tritici*" in the same sentence.

I think myself fully justified in asserting, that the puncture so often observed in the wheat stalk, is made only by the Ichneumon, because I have frequently been with Thomas Say, when pursuing his investigations upon this insect, and on leaf of the wheat stalk, stripping down the glume or leaf of the wheat stalk, examining the glume or punctured larva, and the living *Ceraphron*; and the circumstance furnishes additional testimony to the truth of MARGARETTA MORRIS's discovery, that the fly deposits its egg on or in the grain, and not in the stalk. It seems indeed impossible that the Hessian fly should effect the latter object without puncturing the stalk or stripping down the leaf; but it is not so clear an impossibility that it should be lain in the root. Whether laid on the kernel or in the root, it must have grown with the growth of the plant; and if in the latter, it will probably be more difficult to provide a remedy. If the Hessian fly and wheat fly both deposit their eggs on the grain, it shows that some of their habits are similar, and that the one must probably pass through the same process in its transformations.

I frankly acknowledge that Margaretta Morris's ob-

servations received no favor in my eyes. I thought it so well ascertained that the Hessian fly deposited its egg in the stalk or culm, that her conclusions excited ridicule rather than conviction. Having been so much in the company of Say, and having relied so much upon his accurate habits of investigation, my faith was not to be shaken by a woman; but it is not the first time men have been compelled to yield to the other sex; and the principal difficulty that remains is, that the Hessian fly has not been seen in the state of a worm, nor the wheat fly in the stalk or culm, by any person who is willing to become a witness for the fact. The insect, whose operations she watched so attentively, may therefore have been the *Cecidomyia tritici*, which, it is notoriously the opinion of all New-England, deposits its egg on or in the berry; and then, "*cradit jidens apud*," makes its next appearance in the shape of long, thin, siliceous, or rather, in the earliest stage gelatinous, semi-transparent, homogenous, contractile, without vertebra, and radiating tubercula, feeding in the berry until it is all eaten.—While on the contrary, the Hessian fly in all its earlier stages is found within the stalk; its larva when first produced from the egg is white, its tail very acute, and abruptly attenuated, the head incurved; the upper surface of the body exhibiting a glossy or hyaline aspect, with an internal viscera like a greenish line; and when it shows thick white clouds, which assist it in advances to the pupa or flax seed state, becomes united so as to exhibit regular transverse segments; when taken from its early membranaceous covering it seems perfectly inert; but when the pupa is advanced to its full state, and assumes a dark reddish brown color, like flax seed, with its pointed covering firmly knitted together, I have known it to start and roll in several places, and when removed from the wheat stalk. If the insect whose habits were thus watched by Margaretta Morris, was observed by her from a larva in the culm or stalk, or if its progress was marked from the latter state until the egg was deposited on the berry, so as to say with certainty that it was deposited by the same insect that was hatched from the larva that occupied the culm, then I think the identity of the two is placed almost beyond controversy. It is plain that the writer in the British Magazine could not have applied the terms *maggot* and *larva* to the worms described by Judge Buel.

We have now arrived at what seems an insuperable impediment to recognizing the two insects as conspecific, viz.: the birth from the ova, of a living active larva in the one case, and of an inert vertebrate larva in the other; and if it is permitted here to make the remark, with perfect deference to the judgment, the accurate observation and excellent intention of the writer, and good name, Judge Buel, that he has of this great and good cause, erroneous views upon this important subject. In looking over the early volumes of the Cultivator, I find all his information derived from others; most of it from British writers, and some from very inaccurate correspondents—not one syllable from a man of scientific investigations.—In vol. 1, p. 82, he considers the wheat worm as oviparous; and even goes so far as to dispel the existence of a fly altogether, giving from authorities nearly forty years back, drawings of the full grown worm, in the very act of laying its eggs within the kernel of the wheat where it had taken its nativity. The whole of this article, commencing, and adapting a report to some English Society, and to be from the pen of Mr. Bauer, is evidently a labored effort, not to identify the wheat fly or *Cecidomyia tritici*, (whose existence is displayed by its power; but to show that the injury was not to be imputed to any thing belonging to the class insects. That the Judge was soon obliged to modify this opinion is manifest from the subsequent numbers of the same vol. p. 115, where he confounds it, through the agency of a correspondent, with the weevil; and in vol. 3, p. 65, he admits it to be a weevil; and says it is sometimes confounded with the weevil; and finally on p. 115, he arrives at the same conclusion as other naturalists, and makes a fly, depositing its eggs upon the wheat, but dropping a fly, depositing its eggs upon the ground where it remains during the winter. As all the prevalent notions of the wheat worm deriving its existence from the wheat fly, have originated from this or some equally loose foundation, without any accurate or properly authenticated investigation, I shall take the liberty of thinking that the wheat worm is the *Ascius pumilus*, which is said to have been so destructive in Scotland in the year 1830, (Country Times, May 17, 1830.) I place all the flies that infest the wheat, indeed there are more than one, under the order *Diptera*. Mr. Bauer (and Judge Buel endorses his opin-

ion) calls his worm the *Fibrio tritici*, which in plain English, means a fly vibrating or quivering over the wheat, and at the same time furnishes a plate of a worm laying its egg in the grain, and surrounded by its young brood, as described in the figure; the Judge naturally enough adopting the figure and rejecting the Latin, cautions his readers against the opinion of a fly originating so much mischief and argues in favor of the worm.

But the whole argument derived from the deposit of larva in the one case, and of a living animate being in the other, may be put on the debitor side of our profit and loss account, when we know that there are a considerable number of insects of the order *Diptera*, and a large number of the *Fibrio*, that are oviparous and viviparous in the same spring or period of their existence, i. e. they produce young once alive in the spring, and then by eggs in autumn. Whether the Hessian fly or the wheat fly possess this power, I am not naturalist enough to decide; that they neither of them produce living animated contractile worms, I am fully satisfied, as well from all the analogies of nature, as from the writings of those who favor such an opinion in the columns of the Cultivator. They have had no more success in convincing me of such an opinion, than they would have had if they had traced the genealogy of the House of Hapsburg—or the transmutation of wheat and chess to the same source. When the two insects attain what is called the pupa or flax state, they are so exactly similar that I cannot tell to make the necessary distinctions; and if there is any, it probably arises from the one being hatched from the ova and larva in the grain of the wheat the same season, and the other remaining over the winter, and growing with the wheat stalk. The following very significant remark of Say, who had Kirby's knowledge before him, is worth noticing upon this subject:—"When several of them (*Cecidomyia tritici*) are contiguous on the same plant, the pieces stare on the body of the larva is unequal, and an *inequality* in the form of the body is the consequence."

It is admitted by all scientific writers, that in *bot species* of the *Cecidomyia*, the antenna are biflorous with joints unequal and globular; wings immemorial and horizontal, and proboscis salient or moving with a snap; their legs and poises the same in form and number. Having myself never seen any but what I thought the same insect, and having no compound microscope, but only a small magnifying glass, a description of the Hessian fly would of course be very minute, but the head and thorax are black; the abdomen dark brown, longer than the body; the abdomen itself is brown and is covered with short black hairs. This description is from the living specimen. Now what says Kirby, who undertakes to describe *Cecidomyia tritici*—that "the head and thorax are black, body of a dark orange hue—wings brownish fringed with slender hairs, incumbent and horizontal shorter and wider than those of the Hessian fly, approaching more to the sub-oval; the whole is somewhat less than the Hessian fly. He represents it as having a snap or puncturing instrument which we have not yet detected in the Hessian fly but which it is very probable the latter also possesses."

If I should follow the example of Judge Buel, I feel the wings and adopt the drawing of the wheat worm delineated in the wheat is a true *larva* of the; the jointed segments, membranaceous covering and general aspect indicate this very strongly; it is the circumstance of its being preyed upon by the Ichneumon, corroborates the opinion.

HOLKMAN.
Friedville, Pa. 7 mo. 21, 1841.

Agricultural Address at Rochester.

The Address delivered before the Monroe County Agricultural Society was listened to by a large & evidently highly gratified audience. Notwithstanding the hour was late, and many farmers had a long way to go to their homes, none seemed to regret time occupied, or wish it were shorter. At the close it was unanimously resolved that a committee be appointed to wait on the Speaker and request a copy of the Address for publication. We do not often de it expedient to occupy our columns with agricultural addresses, but this one contains so much important truth, so well adapted to the times, and so eloquently expressed, that we think we should do our duty by refusing it a place in the Farmer.

wish every one of our twenty thousand readers would read it, and we believe in one who do so will regret the space or time it occupies.

Rochester, Monday morning, Oct. 18.

E. D. SMITH, Esq.—Dear Sir: The undersigned by a resolution of the Society, were appointed a committee to request a copy of your address, delivered before the Agricultural Society on Saturday, for publication, in obedience to which we now respectfully request the favor of a copy thereof for the purpose aforesaid.

L. BROOKS,

M. B. BATEMAN,

HENRY M. WARD,
Committee.

Rochester, Oct. 19, 1841.

MONROE LEWIS BROOKS, M. B. BATEMAN, and HENRY M. WARD—

GENT—I have received your polite note requesting a copy of my address for publication. The request implies a compliment to the address which I fear the public will deem undeserved. The address was hastily prepared, upon short notice and in the midst of pressing professional engagements, and I should greatly prefer not to have it published; but upon reflection I have concluded that if it is supposed the address will in any degree promote the interests of agriculture, I am hardly at liberty to withhold it. I beg leave to say however, what is well known, gentlemen, to you, but may not be to all who may read the address, that the opinions expressed in it have this confirmation in my practice: that I removed from this city some two or three years ago, on to a farm in an adjoining town where I now actually reside and cultivate such farm.

I am yours &c.,

E. DARWIN SMITH.

ADDRESS

Delivered before the Monroe Co. Agricultural Society,
By E. DARWIN SMITH, Esq.

MR. President, and Gentlemen of the Society:—The first instinct of man is to provide for his subsistence. The first effort of his reason will be to determine how this can best be done. If man were like the beasts which perish, and had no higher purpose—if satisfied with a sufficient provision for his animal wants—he had no ungratified wishes—no loftier aspirations, the necessities of his nature would require of him but small physical exertion, and the character of his employment would be a matter of *mere indifference*. But such is not man; he feels within himself an energy divine; he is conscious that his existence here has a *higher aim*—he is filled with longings for a better state—he believes there is in reserve for him a nobler destiny.

When, therefore, man looks around him to carry out the *primary instinct* of his nature, as a rational being possessed of an immortal spirit, he naturally seeks for such employment as will best enable him to provide for his physical wants, and at the same time be most conducive to his happiness here, and most subservient to the great end of his being. He finds in the simple doom of Providence—"by the sweat of thy face shalt thou eat bread"—that he must dig his subsistence from the earth. For the most of mankind there is no other alternative. The inquiry then naturally arises, Is the employment of the agriculturist best adapted to promote the true interest and happiness of man? The affirmative of this interrogatory, it is my purpose to illustrate. All the enjoyments of *mere sense* centre in *good health*. To a diseased or weakly frame, what luxury addressed to the palate can minister gratification? To a pale, emaciated, heart-stricken being, what is there in the magnificence of a palace, in the pride and pomp of wealth, in the graces of beauty, that can confer any thing more than a painful and transient emotion of pleasure. Where, then, do we find good health—the chiefest blessing in existence—to so great a degree as among the cultivators of the soil? The laboring man knows nothing of the dyspepsia, the gout, and the numerous other ailments that afflict the sedentary and the inactive.

Laboring in the open air strengthens and invigorates his constitution, gives a keener relish to his food, and a sweetness to his sleep, utterly unknown to the luxurious idler.

He may be without some of what the wealthy and clementine of the cities call *luxuries*; but he has a simpler taste and fewer artificial wants. The wealthy inhabitant of the city may live in splendor, surrounded by his retinue of servants—the farmer, like the patriarchs of old, lives in simplicity, a servant unto himself.

A luxurious dinner may detain the gentleman of the city two or three hours at the table. More frugal of his time, and more rational in his taste, a simpler meal satisfies the farmer. The citizen may sip his wine after dinner, and dissipate his evenings at the theatre, or other places of amusement. The pure cold water of the bubbling spring is the luxurious drink of the farmer, and his evening amusement is gathered in the bosom of his family, imparting instruction to his children, and receiving happiness in return from their dual attention, from the interesting developments of their budding intellects, and from the many testimonies of gratitude and affection which their simple, pure, warm young hearts prompt them to exhibit.

So far then, as *good health* and *mere animal enjoyments* are concerned, the cultivators of the soil have greatly the advantage over any other class of men.

But it is not chiefly in these respects that I claim superior adaptiveness in the employment of the agriculturist to promote the true happiness of man.

The greatest source of happiness among men is far above the mere gratifications of sense: it lies in the cultivation and development of their *mental and moral powers*.

So far as *mental power* is concerned, it is a well settled truth, that the increased physical strength which manual labor confers, imparts also additional vigor to the mind. Hence the capacity for mental improvement exists in a higher degree with those who labor than with those who do not. But it may be said that the agriculturists have not the same time to devote to the cultivation of their mental powers as some other classes of men. This is not necessarily so, so far as primary education is concerned. There is no reason why the farmer's children in this country should not be as well educated as those of any other class, and so far as mere common school education is concerned, they generally are. When the farmer has a good education at his *sitting out in life*, he will naturally be constantly adding to his store of knowledge, by reading and reflection. It is doubtless true, that a farmer whose necessities require him to be constantly employed, cannot make the same advances in the sciences, as the man of wealth and leisure. Neither is it essential to his happiness that he should do so. In the present state of civilized society there must be a diversity of pursuits—the exigencies of society require it.

It is not best or fit that every man should attempt to be his own physician, lawyer, author, soldier, and the like. Greater excellence is attained in the various departments by these divisions, and community is of course much better served.

Now I ask not for the farmer that he should specially excel in any department *but his own*; it is not to be expected; *but I do* ask that he have a *fair start* at the beginning—that he be as well educated at adult age as the rest of the community; then I say that his employment is most favorable to mental improvement.

The farmer leads a quiet and peaceful life. He has more time for reading and reflection than the merchant, the mechanic, or any class of business men, except such reading as necessarily falls in the way of the professional men. The merchant, the artisan, or other business man of the city is in a constant whirl of activity and excitement. His store or his work-shop, his ledger, his notes at the Bank, the protests he receives or fears, the *fall or rise* of stocks, the fluctuations of the market, the convolutions, and strife, and bustle of business, the thirst and the plans for great gain, and the apprehensions of sudden loss from the bankruptcy or fraud of others, occupy, unsettle, and fritter away his mind. This class of men read much less than the farmers of the country. They may take their two or three daily newspapers and other periodicals; they glance hastily over their contents and then throw them aside, no more to think of them. How different is the case with the farmer. He takes his weekly or semi-weekly paper for general intelligence, and his agricultural paper, and perhaps others. He reads them carefully at morning, noon, and evening, and ponders well their contents. Besides this, he has much time for history, scientific, and miscellaneous reading. As he follows his plough, as he loafs his corn, or milks his cow, his mind is *busy* with what he is reading.

But if the farmer reads less than the business man of the city, it is not those *at read the most*, that *know the most*, but those that *reflect the most*.

Who ever, among professional or literary men, has had occasion to mingle with the farmers of this country, at least in Western New York, and spend a night or two, and then at a farmer's house, cannot fail to have been delighted, perhaps surprised, at the extent and variety of the farmer's information, at the strength and vigor of his thoughts, at the acuteness and force of his understanding. Such has been the speaker's experience on more than one occasion, and he is proud to pay this tribute of respect where he thinks it is so justly due.

But if the farmer equals, if he surpasses, most other classes of men in intelligence, he fails not behind any in *culture*. His employment is peculiarly favorable to poetry. "For him the spring distils its dews." "He notices each dew-drop as it—he marks each rising cloud. When he scatters his seed he puts his trust in Providence for its germination. He watches it as it springs up, knowing that his plow's arm cannot make even a blade of grass to grow. If the earth is dry and cracked, he looks to Him who hath set his bow in the cloud, and hath promised the early and the latter rain. More than to other men each day's labor suggests to the farmer his dependence upon a Supreme Being.—To most other classes of men it matters not, whether the sun shines, or the tempest lowers, or the rain descends in torrents, their daily avocations are the same. Not so with the farmer.

Like the mariner tossed upon the billows of the troubled ocean, he is constantly at the mercy of the elements. His fields of grain, one unpropitious shower, one storm of hail, one untimely frost, may destroy.

When, then, autumn comes, and "uncgen evenly gle branch with blooming gold," and the gathers in the corn fully ripe, must not his heart overflow with gratitude to Him "who rideth upon the whirlwind and directs the storm"?

The farmer must be a good citizen. He is too busy to be vicious; he has no time for plotting mischief and wrong; he is removed from the temptations to crime; he is the centre of a social, moral influence; his every action is known to his family and his neighbors; his ambition will lead him to be useful; his position makes him independent, high minded, and patriotic. The occupation of the agriculturist is supported by many to be unfavorable to the cultivation of taste and refinement of manners. This is not so in any just and legitimate sense. If attention to the loquacity of dress and the frivolities of fashion—"if sacrificing substance to show, and substituting the artificial for the natural"—if a passion for vain and frivolous amusement, if a contempt for all industrious employment, if a paltry affectation of *exclusive dress and caste*, if a taste for trifling and senseless conversation, and an exclusive regard to the accidental circumstances of *birth, or wealth, or position*, constitute superior refinement of manners or of mind, then I confess the farmer, and the farmer's sons, and the farmer's daughters, are destitute of taste and refinement.

But if *good sense*, elevation of thought, respect for mental and moral worth, and a capability of discerning it, if a sensibility to all the beauties of nature and of art, if an admiration of what is grand and sublime in the works of the Creator, or magnificent, or great, or noble in the works of genius, or in the developments of mind, constitute or indicate good taste and refinement, these belong to the cultivators of the soil; and one well educated farmer's family possesses more genuine good taste, refinement, and policies, than all the gentlemen and ladies which the Parisian waltzers and milliners have ever made.

If the views I have presented are just and correct how intrinsically respectable is the employment of the farmer!—and yet it is quite obvious that these views are not generally entertained or practically regarded—and why is it so? Certainly the greatest department of human industry—that which Providence has allotted for the most of mankind ought not to be disesteemed. That it is to any extent disesteemed and undervalued is the result of opinions and prejudices that ought long since to have been exploded. It is one of the errors that have come down to us from a feudal age—and monarchical governments—that to labor is not respectable. Because in the countries of the old world the farmer is a *tenant* or a *serf*—subject to the capriciousness of some arrogant noblemen—the opinion seems to be entertained by many who affect to give a tone to society in this country, that to labor with the hands is disreputable or alien to true gentility.

Hence, the age is characterized by a general struggle to escape from labor—the notions of those engaged practically to regard *idleness* as the only state of hap-

piness or respectability. How false the idea! how egregious the mistake!

Those who are raised to a condition of care and independence seem virtually to despise those who are compelled to earn their subsistence by the sweat of the brow—not that many will admit this—not that many really think so when they trouble themselves to think at all upon the subject—yet many such persons actually do treat the laborer as though he were an inferior. This is radically wrong. It is no dishonor to be a laborer. It is noble—it is best—it is wisest for man. It is a necessity imposed upon him by the Author of his being, *more in mercy than in chastisement*. It is unfortunate to be ignorant—perhaps a reproach, so far as the means of improvement are neglected—but to labor with his hands no man should be ashamed. It is the false pride of a weak mind to feel it is any degradation to labor. To work—what is it but to fulfil man's duty and destiny—to promote his health—invalidate his body, develop his powers, and perfect his nature.

The desire to escape from labor is particularly indented by the rush that has been for years going on and is still going on, for the largest proportion of our into mercenary pursuits. How many a farmer in this county within the last ten years has listened to his son against his own better judgment—and strained himself to his utmost to set up that son in trade, or to aid him to buy city lots—or western land—and how many families have been ruined by this greedy desire to accumulate property rapidly—*as though wealth were the chief good*. How many a father who had earned a handsome property by his own hard labor and honest industry, has been stripped of his all, and been obliged in his old age to leave his long cherished home and seek a place to lay his bones in the far west, because his son wished, by trade or speculation to get *rich quick*, that he might escape labor. But this is not all; how many a father has selected his son weekly as his, whom he thought too feeble to labor on the farm, and sent him to school and college to get his living by a profession; as though men can live by their *learning alone*, and acquire that learning without the *severest and most depressing toil*. How many lives have been thus sacrificed! But if any think that professional men escape labor, they are most egregiously mistaken. When all the professions are so over-crowded and surcharged, as at present in this country, no man can get a livelihood honestly, in any profession, without the greatest exertion and the most laborious application. The professional man who attains eminence, or even respectability in his profession, labors harder than the commonest hodman. Unlike the farmer or the mechanic, his task is not done at the setting sun. The midnight lamp witnesses his toil, and his wasted health and his enfeebled body testify the price he pays for whatever of distinction he requires. Now—follow citizens, you may assure your sons that *no professional man reposes on a bed of roses*.

It is not my purpose to exalt the employment of the Agriculturist at the expense of other occupations. Far be it from me to depreciate the mechanic's art, or any other department of industry. The exhibitions of the last few days in this city, have presented many works of skill, ingenuity and taste, to excite an admiration, and make us proud of our relations as neighbors and friends to the mechanics of this county.—The Mechanics' Fair just held in this city, reflects much honor upon the mechanics concerned in it—honor upon Rochester—honor upon the county of Monroe.

But then, I must insist that the artisan is not generally surrounded by influences so happy—so elevating and so ennobling as the farmer. He is ordinarily brought up in crowded cities—*“the festering stews upon the body politic”*. But he has a home, there are advantages over farmers—principally, however, in the facility with which he can associate with others in the same condition. The mechanics can often meet together, and by means of their Trades, Union, and other Associations, are doing much to elevate themselves as a class. These societies, the offsprings of free institutions, indicate the existence of a noble impulse pervading the popular mind—an impulse that is calculated to break down the social barriers and artificial inequalities that exist in society, and place all men upon the republican ground of a common equality.

It is in the same spirit and for the same purpose that Agricultural societies are formed. Such societies are eminently calculated to elevate farmers as a class. Their object and purpose is to remove, as far as practicable, the disadvantages attending their dispersed condition. They seek to bring together those who would own a common occupation and have a common in-

terests. They serve to promote acquaintance and social feeling—to excite emulation and to stimulate activity and enterprise. These societies now, through the munificence of the State, are springing up in every county, and are calculated to do great good—every farmer should sustain them by his aid and his influence.

It is true that the premiums which these societies are able to award are but trifling—but they can be increased and will be, as farmers more generally contribute to their funds. But it is not the premiums that our members chiefly look to. These cannot be awarded to but few—and diversity of opinion may arise and doubtless will exist in regard to the discrimination which the various committees must necessarily make. The committees may err—but what of that?—the principle of improvement is the point at which we aim. If but twenty farmers in the county give increased attention to the cultivation of their farms, by reason of this society, much is attained.—The experiments, discoveries and improvements of these twenty farmers may do incalculable good. Let but one half the farmers of this county come into this work, and let the *New Genesee Farmer*, (which permit me to say should be a constant visitor in every farmer's family in this county,) herald monthly the improvements and discoveries which would be made—and what important results for the farming interest of his county, and this whole country would be produced.

The American farmers have a noble field for cultivation. In their hands is the destiny of this nation. “To them is committed the ark of man's hopes”—and it remains a fearful problem to be solved “whether they will faint by the way or barge in on triumph.”

Farmers of Monroe—Are you prepared to meet your high responsibilities? In the heart of one of the best sections of the State in the world—occupying a soil of unsurpassed fertility—with hardly a waste acre of land in your county—where luxuriantly grows all the fruits of a temperate climate—possessed of extraordinary facilities for the marketing of your surplus products, and for the diffusion of intelligence and the interchange of social offices—what may not the world expect of you in advancing the important interests of Agriculture, and in carrying forward the great cause of human rights and christian philanthropy?

Who can tell but that from this Fair, an impulse may be gathered which in the process of years may result in converting this county into another Paradise, and in rendering its inhabitants the most enterprising, the most intelligent, and the most enlightened in all America.

The Fair at Syracuse.

Before this paper reaches our readers, most of them will doubtless have seen pretty full accounts of the Cattle Show and Fair of the N. Y. State Ag. Society, held at Syracuse on the 29th and 30th of Sept.: and as our columns are very much crowded this month, we have concluded not to give any detailed remarks concerning it. The exhibition was a very good one, and if in some respects it did not quite equal our expectations, it exceeded them in others, so that upon the whole we were highly gratified, and became fully convinced that the annual Fairs of the State Society may be made eminently useful, as well as interesting. The attendance of farmers was very great—and the bringing together of such an assemblage of intelligent and public-spirited Agriculturists, from all parts of the country, cannot fail to produce the most beneficial results. It is proposed to hold the Fair at the same place next season, and if that is agreed on we felt quite safe in predicting that it will be a most splendid affair.

We were greatly disappointed at the late Fair, in that there were no cattle or stock of any description from the Western counties. Our Western friends are greatly at fault in this thing, and we will not attempt to serenade them from the censure which is justly cast upon them. It is true, the expense of transportation was great, and in one case sickness was a partial excuse, still these are not sufficient. The Eastern stock owners expected and desired competition from the West; and while we give them great praise for their noble and efficient zeal, we are obliged to

confess that our favorite Western New York will stand degraded until by proper exertion she retrieves her character. All we can say for her is, we believe that she will be well represented next year, and that a goodly share of the premiums will go to pay the expense of transporting Western animals.

Want of space, this month, compels us to omit some of the remarks connected with the reports of Committees; also the resolutions and proceedings of the Society. We may give some of them next month, together with the list of premiums on Field crops, and Butter and Cheese to be awarded at the annual meeting of the Society to be held at Albany on the 18th and 19th of January, 1862.

Award of Premiums.

CATTLE.

Class I.—Bulls—3 years old and over.

To John M. Sherwood, Auburn, for his bull “Archer,” bred by F. Roth, 3 years old, 1st prize.
To L. P. Prentice, Albany, for his bull “Nero,” bred by himself, 2d prize.
To C. N. Bevent, Albany, for his bull “Astoria,” bred by himself, 3d prize.
To Elias Gaylord, Skaneateles, for his bull “Splendid,” 4th prize.

There were several other animals [in this class] on the ground, possessing in the estimation of your committee, high grades of excellence, and they only regret that the premiums were not more numerous. Among these were Messrs. McIntyre, Van Bergen, Pond, and Sears.—*Report of the Committee.*

Class II.—Bulls—2 years old.

To John Johnston, Fayette, Seneca, for his bull “Royal William,” bred by G. V. Sackett, Seneca Falls, 1st prize.
To Thomas A. Clark, Chittaugus for his bull “Young Waterloo,” bred by J. H. Gilbertville, 2d prize.
To D. D. Campbell, Schenectady, for his bull “Rotterdam,” bred by himself, 3d prize.
To Nicholas Garner, Binghamton, for his bull “——,” bred by himself, 4th prize.

Class III.—Bulls—1 year old.

To Messrs. Kinner, Cortlandville, for his bull “Daniel Webster,” bred by G. V. Sackett, Seneca Falls, 1st prize.
To Enoch Wells, Navarino, for his bull “Brutus,” 2d prize.
To Benjamin Sicker, Cortland, for his bull “——” 3d prize.
To Joseph H. Houghton, Holt, Cortland, 4th prize.
Your committee here leave to express their regret, that though the exhibition in classes II, and III, were very numerous, yet but few of the animals were in what they considered *common stock order*; which rendered the effort of comparison with such were high felt very difficult.—*Report of Committee.*

Class IV.—Cows.

To John M. Sherwood, Auburn, for his cow “Sella,” bred by F. Roth, 3 years old, 1st prize.
To Ezra P. Prentice, Albany, for his cow “Daisy,” 3 years old, bred by himself, 2d prize.
To John M. Sherwood, Auburn, for his cow “Daisy,” 12 years old, 3d prize.
To John M. Sherwood, Auburn, for his cow “Pansy,” 5 years old, 4th prize.

To Corning & Sotham, Albany, for their Hereford cow “Matchless,” imported, an extra prize, equal to the highest premium awarded in this class.
Your committee further report that a new and beautiful race of cattle were presented for their examination, the Herefords, imported by a distinguished breeder of cattle, residing in Henry county, which they take pleasure in recommending to the attention of those who desire to improve their stock. Your committee recommend a special premium of twenty dollars for the Hereford cow “Matchless” as we consider her a very superior animal, and they would also suggest the propriety of offering and awarding premiums for the best blooded animals of each individual breed, Improved Short Horned Durhams, Herefords, and Devons, at their next annual meeting, in addition to the premiums offered for all classes of animals of any breed.—*Report of Com.*

Class V.—TWO YEARS OLD HEIFERS.

To John M. Sherwood, Auburn, for his heifer “Stylva,” bred by F. Roth, 1st prize.
To E. P. Prentice, Albany, for his heifer “Diana,” bred by himself, 2d prize.
To Corning & Sotham, Albany, for their Short Horn and Hereford heifer “Eliza,” imported, 3d prize.

Class VI.—YEARLING HEIFERS.

To Ezra P. Prentice, Albany, for his yearling calf “Charlotte,” bred by himself, 1st prize.
To John M. Sherwood, Auburn, for his yearling calf “Norma,” bred by F. Roth, Cortlandville, 2d prize.
To John M. Sherwood, Auburn, for his yearling heifer “Dianthe,” bred by J. Alexander, Burlington, 3d prize.
To William Fuller, Seneca Falls, for his heifer calf “——,” bred by himself, 4th prize.

All the animals on which the above prizes were awarded, with the exception of the Hereford cow and the Short Horn and Hereford heifer of Messrs. Corning & Sotham, were thoroughly bred improved Short Horns.

Class VII.—GRADE COWS.

To William Ward, Canisius, for his 8 years old half bred Hereford cow, 1st prize.
To W. H. Sotham, Perch Lake Farm, for his half bred Durham cow, No. 1, 2d prize.
To W. H. Sotham, Perch Lake Farm, for his half bred Durham cow, No. 2, 3d prize.

Free Trade--British Corn Laws at the Lowest Scale of Duty.

A writer in the October number of the Democratic Review, produces a long elaborate, but rather slashing article under the above head, in which he says that the effects of restriction on trade in the shape of a national tariff is to "produce a mere transfer of labor and capital, to take money from the pockets of one class of men to put it in those of another; and what one class has gained another has lost. One method of industry has been encouraged while all others have been depressed. Labor and capital in a particular department have been rendered more productive by diminishing and exhausting their energies in other departments. In what way has industry been stimulated? What general advantage has there been in this? By diminishing its productiveness in ninety-nine branches, in order that the hundredth may be raised to the average productiveness of what the others were before!" &c. &c.

Well may the writer of the above article call to his aid the far fetched and one sided evidence given in before the British House of Commons, to support his doctrine; since all the results of practical experience on the subject in our own country strike at the very root of his theory. We will not go beyond our own manufacturing town to prove, that since the manufacture commenced, of those articles which are protected by the compromise tariff, real estate has risen 50 per cent—both the consumption and the price of all agricultural production in the vicinity have increased in still greater ratio, giving a corresponding increase to the wages of the mechanic and the laborer, and multiplying the number to a ten fold extent so far from those manufacturing establishments which are favored by a tariff, being prejudicial to the general trade, they give it its greatest stimulus, by the aid they give to the farmer in the purchase of his supplies, and to the laborer and mechanic in the employment they receive.

We have one extensive woollen company here, which could not have had an existence, but for the protection given by the compromise bill—at this time their cloths are selling in N. Y. at remunerating prices, to an extent which alone does more towards equalizing the exchange of this country, than all the other staples sent to the same market, if we except flour, and yet the amount thus disposed of is not a tithe of the home trade. And what has produced all this—we answer manufacturing industry judiciously stimulated by moderate protection, in the shape of a national tax on the correspondent imported article, from the over populated old world.

The advocates of free trade have supposed that the repeal of the British Corn Laws would be a great boon to the United States, what is the result now when the duty on wheat in England is reduced to three halfpence a bushel. The continent of Europe supplies her cheaper than we can. Such is the price of labor in the United States, such the demand for the home consumption,—for manufacturing New-England,—that should England want two or three days rations of bread from us—the price in New York would rise a dollar or two on the barrel of flour. When flour in New York is above \$5, Europe can successfully compete with us in the sale of bread stuffs in most of the foreign markets—let us then look to a home trade rather than a free trade for our sure and steadfast hold of hope.

S. W.

Watrous, October 8, 1841.

For the Genesee Farmer.

Accommodations at Syracuse.

A MAN CHARGED A DOLLAR A MEAL.

It must be confessed, that it is no very easy task for the public houses of one village, to accommodate several thousand persons. That the people of Syra-

cuse did their very best, at the late State Fair, none I presume will question. But the extravagant charges made by the principal tavern, should not be passed in silence. If any thing will deter our farming citizens from attending such fairs, it is this *gentle and honorable* way of emptying their pockets. Indeed, we are rendering ourselves altogether ridiculous, by preaching economy and moderation at all other times, and then recommending that, which is accompanied with profuse waste of money. Some of us well remember, of other similar societies broken down, and by costly dinners, merely; how much more so then, will it be in the present case, where after spending two or three days, and partaking of no better fare, certainly, than at our own ordinary farmhouse dinners, (good enough to be sure,) we found ourselves very noticeably charged at the rate of about a dollar a meal, including breakfast and supper, throughout. I am told that other houses were very reasonable.

But it is said that this high charge secured select company at the house in question. Not at all! The majority, I doubt not, neither knew nor suspected any thing till they paid their bills. But had they all known previously,—why then—save me from such company! A company, not of the sensible, the intelligent, the wise. But rather of spendthrifts, and purse-proud, and needlessly wasteful, and would be thought rich. No wise man, no business man, will throw away money. There are calls enough for it elsewhere. An extravagant man is one generally who neglects to pay his honest debts, so far as my observation extends.

I would respectfully suggest, that the Executive Committee of the New York State Agricultural Society endeavor to remedy this evil in future, as they desire the prosperity and good of the Society, and to extend the benefit of its fairs to the farming community at large. And I would propose that an arrangement be made with public houses to give the preference of admission to members; this would induce many to join, for the sake of entrance, and be the means perhaps of putting hundreds of dollars into the treasury.

Having now done with the *external* side of the question, permit me to notice one instance of praiseworthy liberality, in the case of the Auburn and Syracuse rail-road officers,—who ran an extra train of cars each day, charging only a dollar for each passenger to Syracuse and back. And a low rate to say also, while on the subject of rail-roads, that I was very sorry to see some time ago in the New Genesee Farmer, a recommendation of this and pocket book travelling as cheap modes for farmers. Old Ben Franklin preached from a different text, touching economy;—and Poor Richard.

A MEMBER.

From the Albany Cultivator.

Milking Properties of the Improved D. Cows.

MESSES. GAYLORD AND TURNER. An esteemed friend, Mr. BARTLETT of Connecticut, has called upon my brother and myself, through the July number of your valuable periodical, to give some account of our herd of Short Horned cattle, and I must plead other and more pressing avocations as the only reason why he has not met with an earlier response. The object of Mr. Bartlett appears to be, to show that so far as our animals are concerned, they do not sustain COLMAN'S position, that Durhams are inferior to the native race for milking and dairy properties. LEWIS F. ALLEN, Esq. to whom Mr. B. refers, has, in the June number of your paper, met the position taken by Mr. Colman with great ability and success.

Besides high grade, and some native, we have twenty-five thorough bred animals. By the term *thorough bred*, I mean animals which are themselves, or whose dams and sires are recorded in Coate's Herd Book, which furnishes for them full and undoubted pedigrees. Among these animals, we have one cow and three female descendants, the produce of two animals which were imported by Enoch Sibley, Esq. of this state, under the name of "Boston," and were bred by Robert Curry; one cow with two female descendants, the produce of Washington and Panzy, imported by the late Patroon, and bred by Mr. Chapman; two females, the produce of Harriet, imported

by Joseph Lee; and one cow, the produce of Anabel, imported by the late Stephen Williams, and seven other female descendants of the last named animal. One of these cows is sixteen, and two others fourteen years old. All of them are in good health and exhibit the appearance, so far as condition is concerned, of being young animals, and two of them have regularly bred up to this time. These facts do not contribute to prove that this breed of animals are so tender and delicate to endure our cold climate, as I have occasionally seen and heard it alleged.

The milk from nearly all of our cows is unusually rich, and the quantity much greater than we have been able to obtain from superior mixed cows with the same keep. My brother has regularly had good common cows on his farm for about twenty years, and he affirms without qualification that is fact.

Our cows have not given us much milk, nor made as great a quantity of butter, as have some other Short Horns, yet one of them, in April last, on last, made more than twelve pounds of butter in one week, and we have repeatedly converted the cream in small quantities from this cow, into butter in fifteen seconds. In June, upon grass alone, this cow gave 350 lbs. of milk in a week, being milked but twice a day; the milk at this time was converted into cheese, and consequently no butter made from her. Had she been milked three times a day at this period, I am quite confident that her product of milk would have reached 400 lbs. of butter not less than 14 lbs. per week. We have another cow which averaged 48 lbs. of milk per day in June, and still another, (now quite old,) which a former owner assures me has yielded 28 quarts of milk per day.

We have also two heifers with their first calves, which averaged 27 and 35 lbs. milk per day throughout the month of June last.

I will readily admit that among the great mass of the common cows of the country, we occasionally find those which are very deep and rich milkers. But little reliance, however, can be placed on their progeny for the same properties, whilst with thorough bred animals, by using bulls from deep milking families, the produce is quite certain to partake largely of the sires and dams.

It would indeed be remarkable, as Mr. Allen well observes, if, in traversing the whole of this State, in the discharge of his official duties, Mr. Colman, our late highly respectable Agricultural Commissioner, did not discover among the great mass of our common stock, some superior milkers and valuable dairy animals.

In the 4th vol. New-England Farmer, I find the following opinion given of the Short Horns, by Governor Lincoln, in a letter to Mr. Powell:

"I have now (of Denon's progeny) seven heifers in milk, four of them three years old, and three two years old; and for richness in quality and abundance in quantity, they are not excelled by the best cows of any age of the native stock. A heifer three years old, with her second calf, has not been dry since she dropped her first calf, having given 4 quarts on the morning of her second calving. For the dairy and the stall, I speak with the utmost confidence of their pre-eminence."

I have recently had an interview with the intelligent and persevering owner of the "Crom Rect" breed of cattle, and Col. Jacques assured me that he attributed the rich dairy properties of his herd more decisively to the Short Horned bull Calda, than to the native Haskins cow, from which his whole herd as I understand, descended; and it would seem from Mr. Haskins's own account of the produce of this cow as published in the 5th vol. New-England Farmer that he must be correct in this opinion; as they are there represented as having made in two days 2 1/2 lbs. butter, which is 9 lbs. 10 ounces per week, being by no means a remarkable product when compared with the milk of many of the Short Horns.

In Mr. Allen's valuable communication, he is given the product of six short horn cows, viz. in bold milk and butter from three animals, in butter alone from one, and in milk alone from two animals.

The butter from the four animals varies from 11 1/2 to 22 pounds per week, making the average of the four cows 15 lbs. 6 oz. per week.

The milk from the five cows is from 28 to 25 quart per day, averaging for each animal more than 32 quarts per day.

Besides the product of these six cows, I find the produce of butter from six more Durham cows, as follows, viz:

Mr. Hnsker's cow, 19 lbs. butter in 1 week, *New E Farmer*
Mr. Calvert's cow 373 do. do. in 32 weeks, *Farmer*
Mr. Conby's cow 533 do. do. in one year, *col. 7, 150.*

Thomas Ash's cow, 544 lbs. do. in 25 days.—do. vol. 12, p. 50.

Danham cow, 147 lbs. do. in one week.—*Ibid.* 17, p. 402.

Fr. Woolrich's cow, 145 lbs. do. in 1 week.—*Cont. Farmer*, vol. 6, p. 102.

My belief is that the pure Short Horns, with good cop, (and so annual will thrive when starved) is much more valuable than any other race, for the steers, for the bull, and for the dairy; yet if our breeders are reared a better race, without system and without at least care in breeding, I shall bow with submission, regret the cost of my error, and hereafter "tread a new metstep."

WELLS LATHROP.
South Hadley Falls, Mass., Aug. 19, 1844.

Salt in Michigan.

The following article from the Grand Rapids Inquirer, contains interesting and important facts for our Western Readers:

"SALT.—We congratulate our fellow-citizens of Grand River Valley, and of Western Michigan, upon the fortunate result of the undertaking of Mr. Lyon to obtain salt water at this place. His efforts are rewarded with success equal with his wishes, and in no particular far exceeding his imaginations. For about eighteen months the work has been progressing, while many doubted, and all hoped, but few were sanguine of success. At a depth of about 300 feet, indications of salt first became apparent, but for a long space after nothing further seemed to be gained, and many began to think they had been cheated for ought. The works were continued until the shaft 11 feet sunk 661 feet, when the evidences were such that the operation of boring was suspended, and the salt was as certain in quantity and quality of the run.—On Saturday last (the 25th) the tubes were at depth to the depth of 360 feet but little over half a depth of the well, when to the joyful surprise of all, are brine, of the quality of one bushel of salt to from 12 to 55 gallons; ascended and poured out of the tube with immense force. It is estimated that the tub which carried fifty feet higher, and the brine will escape. What is the quantity of the brine which will naturally discharge, it is difficult to ascertain, but is estimated from 6 to 8 gallons. Thus, without the use of a pump, or any means of elevation, we are unparalled in the history of salines.

It is intended to sink the tubes still lower into the salt well, under the anticipation that the brine obtained will be much stronger, as it is further the unacted on the fresh limestone above. Mr. Lyon, as we learn, will commence boiling immediately, as soon as he can obtain kettles and place them.

Again we congratulate our readers and this valley—we have a fountain of wealth in our midst, which will enable us to forget the Act, and snap our fingers at the Bankrupt and Distribution Bills. What may we not expect from our salt, our plaster, our pine, the fertility of our soil, our immense water power, our coal, and our navigable river. Where can we find such a combination of sources of wealth in Michigan as the west?"

from the Western Farmer's and Gardener's Almanac for 1842
Causes of Decay in Peach Trees, and its Prevention.

To the early settlers of the West, the peach was a scarcely procured luxury. The kernel was planted in the fence-corner, and grew and produced a thrifty and healthy tree, with but little care or attention, and regular crops of fine fruit, for a number of years.

This being the case, why do we find so much difficulty at the present day? How do we account for their success then, and for our frequent failures now?

In early times, when the whole face of the country was heavily timbered, our winters were less severe than they are now. Our climate, unlike that of Great Britain, seems to increase in rigor as the country is improved, until, at this time, the peach tree is not infrequently winter-killed.

In addition to this, the following causes had their influence: The kernel was taken from the fruit of an unimproved tree; those being of course selected which produced good fruit—thus the influence, exerted by the stock if evil, was avoided. The kernel was planted where it was meant to stand—the young tree escaping the mutilation and checks too often received in transplanting. It was left to grow pretty much in a state of nature, by which the stem was shielded from the injurious effects of the full blaze of a summer's sun; for his tree, like the beech, will not do well if so exposed. The soil was fresh and good, and kept the tree in a

vigorous and growing state. The clearing by an generally small, was in a great measure protected from late spring frosts. The disease called "yellow" had not as yet been introduced by the peach insect; the "Ageria extort" of naturalists.

Now, trees are bought from the nursery men, the older and the larger the better! The stocks too often produced from the kernels of unimproved or even unhealthy peaches; allowed to grow two or three years before they are grafted, dug up without care, and scarce a root, and certainly not a fibre, left for their support; the stems bruised and chafed, and closely pruned to proportion them to the mutilated roots. They are kept out of the ground for a length of time; conveyed to the planting ground unprotected; and there set out in little holes, dug out of the sod, in thin, poor soil, where they are left to struggle through a year or two of a miserable, sickly existence. In the nursery-row, the top of the one protected the stem of the other; but now there is no such defence.

The peach-fly deposits its eggs, which are left to hatch, and the worms to commit their ravages undisturbed. And being generally planted in an open, southern exposure, in whose bushes swell too soon, and are destroyed by their first severe frost.

Let us now state what we consider to be the proper practice. Select a piece of rich, new land; if a tolerably stiff loam, with a surface coating of leaf mould, on the north or north-east side of a hill, near a large water course, the crops will be more abundant and sure, tho' not so highly flavored as if grown in a sandy soil.—Plough it deeply and carefully in the fall; and in addition, mark off the holes, and have them dug down to the sub-soil, or at least two spaces deep, and six feet in diameter.

If you intend purchasing trees of a nursery-man, which is the cheaper course, if you have credit, and the trees are good, you may depend, go as early as possible in the spring, and select young, healthy trees, not more than one year from the bud, and two from the kernel. Have them taken up very carefully, so as not to destroy even a rootlet that can be avoided; dip the roots in sludge, if you have to carry them more than a mile, and plant them without delay. Throw some of the surface soil into the hole, after loosening the bottom with the spade; drive a stout stake into the centre, to which to fasten the tree; then place the tree close up alongside of the stake, and while an assistant throws in the surface soil round the roots, shake the tree gently, so as to allow the earth to run in and fill up every vacant space; taking care to extend the roots all regularly, and to plant it but very little, if any, deeper than it stood before. Tend the tree with care, and after pouring a couple of buckets full of water round the tree, and fastening it firmly to the stake with a soft band, you may consider the operation of planting completed as it ought to be. It is perfectly folly to purchase trees and plant them, as they are usually planted. If the soil is not naturally rich, manure it all over, but do not put any round the roots of the trees—rich compost or mould from the woods or stable yard, may be placed immediately round the roots.

It is intended to grow the trees from the kernel, select good ones, the produce of healthy trees. Bury them in about two or three inches of soil, as soon as you can in quantity, mix them with double their bulk of earth, and ridge them up in a safe part of the garden, covering the whole with an inch or two of soil, and leave them over winter. Towards the end of February, or first of March, examine them, and plant out such as have opened but without removing the shells. Put three or four where they are intended to stand; and in July or August, inoculate them with the kind of fruit you wish. In the fall or spring, all can be removed but one. Never put off inoculating till the second year. For their after treatment, see the article on budding. A peach orchard should be tended in some such crop as potatoes, beets, melons, sweet potatoes, etc., and if necessary to sow it down, let it be like clover; taking care to keep a space round the trees of six or eight feet in diameter, free from grass and weeds. Trees never will bear or thrive, in a meadow, or blue-grass soil.

For some years past, the insect called the "Peach fly," or "Peach-tree worm," has occasioned the ruin of thousands of trees in the west. See article on their history, and the preventives to be used.

New Boots.

A pint of linseed oil, two ounces of beeswax, two ounces spirits of turpentine, and half an ounce of Burgundy pitch,—slowly melted together, and then applied to new boots, will render them water tight with-

out becoming stiff. The Correspondent of an exchange paper, says he has used this composition many years; and believes that his shoemaker's bill has been reduced by it one half, so conservative are its effects on the leather.

Botanical Etymology.

When Dean Swinburn suggested that the name of *Andromeda* (an Homer) was derived from *Andrew Macchia* a Scotchman, he was in error; but when Professor Eaton attempted to make out *Adiantum* from the Greek, he was in error also,—though we consider it (if possible) the greater blunder of the two.

A few words will explain our meaning. About twenty-five years ago (more or less) Professor Rafinesque changed the name of the plant *Corydalis fungosa* to that of *Adiantum cirrhosa*; and Dr. Dailington says (what we had understood before) that the new genus was "dedicated to Major John Adlum, a distinguished cultivator of the vine," who resided some years before his death near the city of Washington, and whose name and character to us had long been familiar. With part of his father's family indeed, (mother, brother, and sisters,) we were personally acquainted, so that no shade of uncertainty or doubt can bring over the reality of that family name.

In the 8th edition of the "Manual," or "North American Botany," published last year, we find however, at page 211 that *Adiantum* comes from the Greek:—"a (without), lamen (dirt), a spongy cleanser." Now will not the learned author of the "CYCLOPEDIA OF LITERATURE," give this circumstance a fitting place in his next edition?

Sugar from Corn Stalks.

William Webb has addressed a letter to the President of the New Castle county Agricultural Society, in the State of Delaware, dated Wilmington, 8th mo. 25, 1841, recommending the manufacture of sugar from corn stalks; and we learn from the Pennsylvania Freeman, that the specimens exhibited (including molasses) were much admired for their flavor and appearance.

During the Revolutionary war, when our commerce with the West Indies was nearly annihilated, we can remember that molasses was prepared from this material, by pressing out the juice in a cider mill, and boiling it down; but though sweet, it was rather unpalatable, not having been properly purified. No doubt can exist however, of well ripened corn stalks abounding in saccharine matter; and boys in the act of chewing them, soon discover that the smallest and reddest are always the sweetest.

In accordance with this fact, W. Webb recommends planting the corn in rows two and a half feet apart, leaving the stalks to stand in the rows only three inches from each other. No ears are allowed to grow or ripen; and on this precaution he considers the success entirely to depend. In reference to this improved method, he says, "In one case I obtained from a small piece of ground, at the rate of 100 lbs. of sugar per acre; but other experiments made since, have conclusively shown that had a different mode of planting been adopted, the product would have been increased ten fold."

The crop will generally be fit to take up "in September. The stalks are then cut up at the root, stripped of their leaves, and taken to the mill, where the juice is pressed out between iron rollers. Lime water about the consistency of cream, is then mixed with the juice, one spoonful to the gallon. It is left to settle one hour, and then poured off into boilers, which are covered until the liquid approaches nearly to the boiling point, when the scum must be taken off. It is

*Flora Cestrica, page 399

then boiled down as rapidly as possible, taking off the scum as it rises. As the juice approaches the state of syrup, it is necessary to slacken the fire to avoid burning. The boiling is generally completed when six quarts are reduced to one; it is then poured into coolers, or moulds, and set aside to crystallize."

The estimates of the manufacture of sugar from corn stalks and beet roots, as follows:

"1st. The corn is clean and agreeable to work with, while the beet is not."

2d. The machinery for extracting the juice from beets is not only more costly, but is more liable to get out of repair.

3d. The beet juice contains a much greater proportion of foreign and injurious matter; decomposition commences almost immediately after it is pressed out; and if allowed to go on to any extent, will entirely defeat the making of sugar.

4th. The proportion of saccharine matter contained in equal quantities of corn and beet juice is as *three to one* in favor of the former; therefore the same difference will be found in the amount of fuel necessary in evaporation.

5th. Beet sugar when obtained is inferior in quality, and loses a larger per centage in refining."

Geology of North Sherbrooke, U. C.

We received, in August last, a communication of a very interesting character from E. Wilson of North Sherbrooke, U. C., on the Geology of the District, where he resides. We have only to regret that it is of a character more purely geological than comports with the object of our paper. We had designed to give some portion of it, but have thought it would prove more satisfactory to our friend, the author, to forward the whole article to Professor Silliman, for publication in his Journal. We quote, however, the following in relation to the effects of the violent earthquake, which, according to the words of the Jesuits, in Quebec, deranged a large tract of country, in U. C. Mr. W. says, "With the exception of a few *vetrans* I find no trees in my broken neighborhood older than about 211 years. I have counted the annual circles of the *Wine Pine*, the stump of which was 6 feet 3 inches by 4 feet 9 inches across, and found it (about ten years ago) 221 years old, so that it began its career 211 years ago. Now, as it happens ever in tempests that sweep the forests, that only small trees are left standing, a young tree struggling to get up in the forest is neither large nor easily thrown down at the age of 61; for such must have been the age of one now 210 years old, in the year 1665, that is 176 years ago. I counted the annual rings of a sugar maple less than six inches in diameter, and found it 30 years old." It seems very probable then that the earthquake of 1665 prostrated the older trees of the forest. The fact would account for the age of the trees now existing. It should however be enquired whether over this wide country the trees of the forest have a much greater age than those mentioned by Mr. W. D.

Seneca County Fair.

This Fair was held at Ovid, Oct. 21st and 22d. We have not yet seen the report, but the Ovid Bee says, "notwithstanding the unfavorable weather, the show of fine Cattle, Horses, &c. was such as to do credit to the county." We deeply regretted our inability to attend this Fair, especially after receiving the following polite invitation, which we take the liberty to publish on account of the just sentiments it contains.

WATERLOO, Oct 16, 1841.

M. B. BATEHAM, Esq.: Dear Sir—I am requested by the officers of the Seneca County Agricultural Society, to invite you to attend the Agricultural Fair to be held at Ovid, on the 21st and 22d inst., and also

that you invite each of your friends as would be likely to attend. Perhaps there never was a time like the present, when the efforts of all influential good men were so necessary to arrest that growing deterioration in the public morals, incidental to late speculation and extravagance, and the consequences they have entailed on community.

We feel that those efforts cannot be better directed than in encouraging a thorough system of Rural Economy, whereby man may be made honorably useful and intelligently happy, in the sane and useful pursuit of this, almost the only calling, which has no temptation adverse to the precepts of religion and morality.

Very Respectfully Yours,

SAM'L. WILLIAMS, Cor. Secy.

Gen. Harmon,--Wheat Culture.

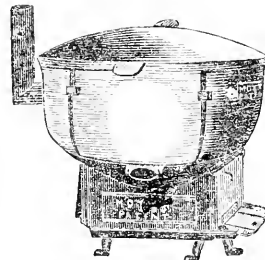
Gen. R. Harmon on Jr., of Wheeland, in this county, exhibited at the State Fair at Syracuse, 21 varieties of wheat, in samples both clean and in the straw. He exhibited the same at the late Fair in this city, but as it did not come under the particular inspection of either of the committees, no mention is made of it in the reports.

The Stump Pulling Machine.--Colonel Drake of Owego informs us that the patent right for this machine, of which he was the proprietor, expired in August last; and any person who wishes to construct them is welcome to do so.

WESTERN Farmer's and Gardener's Almanac, for 1842.--By Thomas Attkin, Cincinnati. Also "Best treatise in the West," by the same author. Price 25 cts. each--\$2 per dozen, for sale at the Seed Store and Bookstore, in Rochester,--Nov. 1.

YOUNG'S Farmer's Almanac for 1842.--We have just published the "Farmer's Almanac for 1842," containing 36 pages, printed on fine paper, with appropriate cuts, Agricultural remarks, cures, valuable tables, anecdotes, recipes and miscellany, for sale at wholesale and retail prices upon the most reasonable terms.

G. W. FISHER & CO., 6 Exchange st.



MOTT'S PATENT AGRICULTURISTS' FURNACE.--Manufactured by M. C. Wedd, No. 53 main st., Rochester, N. Y.--This article was constructed in consequence of a suggestion from the American Institute--that a simple portable and improved Furnace was much wanted by farmers, for boiling or steaming food, preparing molasses or beet-root sugar, and for many mechanical purposes.

It is so formed that a space from one to two inches is left between the boiler and the casing that surrounds it, causing the heat in its passage to the pipe, to encircle all parts of the boiler even to its upper edge.

The American Institute awarded a silver medal at their late fair.

The following is an extract from the Cultivator extra for December:--"AGRICULTURISTS' FURNACE." (Fig. 96). "A good, cheap, and durable boiler has long been sought for by the farmer. Polish kettles, cauldrons and boxes, with sheet-iron bottoms set in brick, have been used, as well as steam boilers of various descriptions; but they all take up considerable room, are clumsy and burdensome. For the last seven years, I have tried all the above-named articles, and have found them by, and substituted one of Mott's patent Agriculturists' Furnace and Cauldron."

"It will be readily perceived that it has many advantages over these set in brick. It takes up but little room, is light, and may be placed on the floor, and requires no foundation to support it. Besides being portable, it may be removed from place to place, as occasion or convenience require; two men are sufficient to remove it. It can be made to boil full of vegetables in 30 minutes, and the second filling in 20 minutes. In this I was happily disappointed, for I had always supposed that brick retained the heat better than iron, and after being once heated, would require less fuel to keep it boiling. Another very

important consideration, and will go far to recommend it, is that it requires much less wood than one of the same size and form set in brick, or even the box, with a sheet iron bottom, so highly recommended in some of the former volumes of the Cultivator. Although wood may be plenty, it takes time and labor to procure it.

"Steam boilers may answer in very large establishments, but I have found them very inconvenient, and very dangerous, as not engine enough to manage it, and the consequence was an occasional explosion or collapse, and in either case an expense and considerable trouble was incurred."

"Some five or six years ago, I tried a copper boiler--a cylinder within a cylinder, the furnace in the center, surrounded by water, very regular and on the same principle as the one figured in the 13th number of the current volume of the New England Farmer, as Doctor Warren's Patent Cylinder Vegetable Steamer, but I found it very expensive to keep it in order, and abandoned it."

(Signed)

Three-Hills Farms. C. N. BENT. 1st. They will be sold at New York prices, adding transportation 3 barrel \$12; 1 barrel \$20; 2 barrel \$30; 3 barrel \$40; 4 barrel \$50. The Mechanics' Fair awarded a silver medal for this, and the Agricultural Society \$3.

Also, for sale at the same place Wedd's celebrated Hot Air Cooking stove, for which was awarded a silver medal for the best cooking stove at the last fair in this city. The public are invited to call and see it.

DISSOLUTION.--The co-partnership heretofore existing between the undersigned, has been dissolved by mutual consent on the 1st day of October. All accounts and affairs relating to the Seed Store and Genevieve Farmer, will be settled by and with M. B. BATEHAM, who will continue the business as heretofore. All matters relating to the Farm or Seed Garden, will be settled by C. F. CHASNEY, who will continue the business of growing seeds.

M. B. BATEHAM,

C. F. CHASNEY.

GARDEN SEEDS in Boxes.--C. F. CHASNEY has on hand a large quantity of garden seeds, and is prepared to supply them with fresh assortments of garden seeds, of his own raising or selection, as he is confident will give satisfaction. Rochester, Oct. 1, 1841.

MILLET SEED, wanted at the Rochester Seed Store.

APPLE TREES FOR SALE. The subscriber has on his nursery on Main st., one mile east of the bridge, Rochester, a choice assortment of grafted apple trees, of large size, warranted of the kinds represented, and embracing from 30 to 100 of the best varieties of summer, fall and winter trees. Price \$25 per dozen. Orders from a distance containing a guarantee or good city reference, will receive prompt attention, and the trees will be shipped or delivered according to its directions. Rochester, Oct. 1, 1841. GLENN'S BOARDMAN.

GILSON'S SAW CUTTER! The undersigned, for cutting fodder, for sale at the Seed Store in Price \$20. M. B. BATEHAM

RATES OF UNCURRENT MONEY.			
Specie,	par,	N. England Bank Notes,	par
Eastern Drafts, 1 per cent		Indiana,	12 1/2
Pennsylvania, 6 1/2	10	Illinois,	12
Ohio,	6 1/2	Kentucky,	10
Michigan,		United States,	20
Maryland,	6 1/2	New Jersey,	5
Susp'n's Bridge &c.	7	Canada,	5

ROCHESTER PRICES CURRENT.

THE NEW GENESEE FARMER, NOVEMBER 1, 1841			
WHEAT,.....	per bushel,.....	\$ 1.00	\$ 1.66
CORN,.....	".....	50.....	
OATS,.....	".....	31.....	
BARLEY,.....	".....	44.....	50
RYE,.....	".....	56.....	62
BEANS, White,.....	".....	62 1/2.....	75
POTATOES,.....	".....	22.....	25
APPLES, Desert,.....	".....	25.....	38
FLOUR, Superfine, per bbl.....	".....	5.50.....	5.75
" Fine,.....	".....	5.00.....	
SALT,.....	".....	1.38.....	
PORK, Mess,.....	".....	10.00.....	10.50
" Prime,.....	".....	9.00.....	9.50
" per 100 lbs.....	".....	3.00.....	
BEEF,.....	per 100 lbs.....	3.00.....	3.50
EGGS,.....	per dozen.....	12 1/2.....	15
BUTTER, Fresh,.....	per pound.....	13.....	14
".....	per lb.....	10.....	12 1/2
CHEESE,.....	".....	5.....	6
LARD,.....	".....	6.....	7
TALLOW, Clear,.....	".....	8.....	9
HIDES, Green.....	".....	5.....	9
SHEEP SKINS,.....	".....	50.....	62 1/2
PEARL ASHES,.....	per 100 lbs.....	5.25.....	
POT,.....	".....	5.50.....	
WOOL,.....	per pound.....	30.....	40
HAY,.....	per ton.....	13.00.....	14.00
GRASS SEED,.....	per bushel.....	1.50.....	1.75
FLAX,.....	".....	87 1/2.....	1.60
PLASTER, (in bbls) per ton.....	".....	6.00.....	
".....	bulk (at Wheatland),.....	3.50.....	

THE NEW GENESEE FARMER.

AND GARDENER'S JOURNAL.

B. BATEHAM, Proprietor. { VOL. 2. ROCHESTER, DECEMBER, 1811. NO. 12. } JOHN J. THOMAS, M. B. BATEHAM, Editors.

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THE CASH SYSTEM.

Subscribers are reminded that this paper is published the CASH SYSTEM, and this number completes volume. Those who have not paid for the next time, are required to remit payment before any more papers be sent them, (Correspondents excepted.) Hand the half-dollar to your Post Master when get this No. from the office. See terms, &c., on page.

New Arrangement—New Editor.
 It is with feelings of no ordinary degree of satisfaction that I announce to the public, that HENRY COLMAN, of Massachusetts, has consented to remove to Rochester, and take the editorial charge of this paper. As an agricultural writer and orator, Mr. Colman is so well known to the public, that nothing more need be said at this time on that subject. The readers of this paper, and the friends of agriculture in this State especially, have reason to congratulate themselves on the new arrangement; and Western New York may well be proud of the honor conferred upon her. Mr. Colman will advocate the interests of the whole country without sectional prejudice or partiality; but at the same time, the district in which he resides will of course derive the greatest benefit from his influence, and will make the most exertion to

Give Him a Hearty Welcome!
 Mr. COLMAN has been assured that the friends of agriculture in Western New York and the Great East would lend him their co-operation and support; through the medium of the Genesee Farmer, he will hold monthly converse with a VAST HOST of the owners of the soil, and that the profits of the publication will afford him a liberal compensation. LET NOT BE DISAPPOINTED. Take your horse and join your neighbors—get them all to subscribe, and they will thank you for it hereafter.

The officers and friends of the numerous

Agricultural Societies
 should make especial efforts to circulate the paper in their districts or counties. Experience proves that this is the ONLY way to have useful and spirited associations. Farmers who do not read such papers never make good members of agricultural societies.—Their minds are not interested in the subject, and they do not rightly appreciate their profession. Let the friends of the cause in the Empire State remember this, and act accordingly; and the spirit of improvement which began to manifest itself so generally the past season, will soon produce most glorious results.

M. B. BATEHAM.

To Correspondents.
 Several communications were received too late for insertion in this number, and various matters requiring editorial attention are unavoidably deferred.

¶ We hope our friends will improve these long evenings and stormy days, so as to send us accounts of their past season's operations.

The Syracuse Hotel.—We have received a letter from Mr. Rust, proprietor of the principal Hotel at Syracuse, complaining of a communication in our last. It shall have a place next month, with explanations.

The Index and Title Page for Vol. 2, will be found in the middle of this number. Those two leaves should be taken out, and placed in front of the first number, then the whole volume stitched together. Those who have the 1st and 2d vols. should get both bound in one. The first volume can still be furnished if desired.

Post Masters
 In this and the Western States, will receive prospectus and a specimen No. of the Farmer; they are respectfully solicited to remit names and payments to us, (as allowed by law.) Our most sincere acknowledgments are due for past favors of this kind.

Papers to Europe.
 Subscribers who wish to send the Farmer as a present to their friends in Europe, are informed that we send quite a number of copies every month. The price is 75 cents per year. (This pays the American postage.)

A Card.

At the desire of Mr. BATEHAM, the subscriber announces to the friends of the New Genesee Farmer his engagement to remove to Rochester, and take, on the first of January ensuing, the exclusive editorship of this work. It is not without a just diffidence that he undertakes this enterprise; but, with honorable intentions, he is persuaded that in the generosity and public spirit of the New York agricultural community, he shall find a welcome. He leaves the good old Bay State, the land of his nativity and the sepulchre of his fathers, not without many strong emotions; but he does not feel that in going to New York he is going from home. He has been long acquainted with New York and her citizens; and has taken always the deepest interest in her enterprises and improvements. He has always regarded her agricultural progress and success with

admiration; and now that in addition to the common ties of friendship and political fraternity the two States are to be linked together by iron bonds in the great interests of internal trade and commerce, he deems his removal much less a separation from home and the friends of his youth.

In going into New York, he feels that he is going among old acquaintances. He had many years the pleasure of an intimate friendship with the late lamented Buell; and he is happy in standing in the same relation of mutual respect and esteem with the present enlightened and indefatigable editor of the Cultivator. Hier Allens and Thomases, and Wadsworth and Gaylord, and Rotch and Viele and Ball and Blydenburgh, and Beckman and Grove, and Bement and Hall, and Walsh and Van Rensselaer, and Dunn and Corning, seem to him like old and tried friends, united by a bond too sacred to be polluted by any base and selfish interest; the bond of a common devotion to the advancement of an improved Husbandry, and the social, intellectual, and moral elevation of the rural and laboring classes.

He goes to New York to continue the labors to which forty years of his life have been devoted; and to unite his humble efforts more closely with theirs in this common cause, the cause of human comfort, of good morals, of private and public good. He will be most happy to be recognized as a joint laborer. He goes to New York with no assumption of authority either to teach or to lead. Nothing is farther from his thoughts. He goes not to drive the team, but to draw in the team; and while he has wind enough left, he promises, without goading or whipping, to do his best to keep the draft steady, and his end of the yoke square. He has no higher earthly ambition than that it may be said of him, when the bow is pulled from his neck, "he has done a good day's work."

The object of the present note, is merely to make his bow to his New York friends; and to say that he hopes for their better acquaintance; and that when he calls again, somewhere about New Year, he shall, "if the old folks are willing, respectfully ask leave to stay all night." He has now just dropped in, and won't intrude.

Respectfully, HENRY COLMAN.

Boston, 27th Nov., 1811.

Premium Pitchfork.

When at the Syracuse Fair, Col. H. S. Randall presented us one of the Premium Pitchforks manufactured by Levis Sanford of East Solon, Cortland county, N. Y. For beauty of form and finish, and especially for the quality and temper of the steel, we have never seen its equal. It is quite a curiosity; we wish the maker would send a thousand this way—they would sell rapidly.

Hatch's Sowing Machine.

Mr. Hatch requests us to say, that in accordance with numerous requests, he is now engaged in manufacturing the Machines at this place, and will be able to supply orders in time for spring sowing.

If you wish to be wise, it is wise to wish.

Apples.

We should estimate the difference of *product* between common seedling apple trees and the best selected varieties, to be not less than ten to one in favor of the latter; but the difference of *value* will appear much greater if we take into view the *quality* as well as the *quantity*. An extensive orchard of seedling trees, originally; and great numbers growing in a hedge, fully bear us out in these conclusions.

The fruit of seedling trees, is not generally so deficient in *number* as in *size*, though both deficiencies often occur; and in wet summers many apples, which would be of good size in dry seasons, become black knobs in consequence of the *Lichen*? which spreads over them in the form of scabs.

It is remarkable that pomologists have generally neglected to notice this circumstance. Have all of them lived in drier climates than ours? Be this as it may, some fine varieties are scarcely worth cultivating in Western New-York, solely on this account. The *Queen* apple may be given as one instance, and the *Autumnal Stewar* as another—both fine fruits in dry hot summers, and both without doubt, better adapted to a lower latitude.

On the other hand, *russets* with scarcely an exception, are free from this smut. We are also inclined to think that apples with thick skins, like the *Black Gilliflower*, more generally escape than those with a thinner integument. It is not improbable however, that some variation from this rule may be found.

The value of apples as food for milch cows, and for the fattening of swine, is becoming more extensively known; and it may serve to console such friends of Temperance as were once largely engaged in cider-making. We find that we have never too many, though we make no cider except for vinegar or apple sauce. Many years ago in a dry season, we first tried the experiment of giving bruised apples in *measured quantities* to our cows; and their milk was greatly increased. Our hogs also grew fat by feeding on this fruit, without any labor of ours, except to see that a sufficiency falls. As the weather grows colder however, they gradually lose the relish for this food, especially when they get something better.

It has long appeared to us that farmers might save themselves from much expence, by planting out small orchards expressly for the keeping and fattening of swine. We recommended this measure to the public more than twenty years ago. By selecting the earliest apples and such as ripen in regular succession, food might be provided in abundance for them during a period of three months. A little swill enriched by milk or meal however, is a valuable auxiliary.

More than four hundred kinds of apple trees are advertised by some nurserymen; and among them are doubtless great numbers of which we know nothing; but we are not acquainted with any apple better adapted to such an orchard than the *Sweet Bough* which begins to ripen in harvest. It bears every year with us, and every year alike—a full crop without breaking down. The tree is rather compact in its form, not spreading wide, and one hundred and sixty might grow on an acre. The fruit continues to drop from it for more than a month, and sometimes for nearly two months.

In planting out such an orchard however, there ought to be earlier apples than the *Sweet Bough*, such as the *Yellow Harvest*; and some later. We want apples for swine, several weeks after the *Sweet Bough* is commonly gone; and among the multitudes that ripen at this season, the farmer cannot be much at a loss to select some that are always productive, and always good.

In another article we have mentioned the *Graevenstein*—“esteemed the best apple of Germany and the

Low Countries.” We have waited two or three years after the tree began to bear, without propagating it, so that we might fully and fairly test its fruit; and we have now arrived at the conclusion that it is *first rate* in every respect. The tree grows freely—a model of thriftiness without any wild luxuriance. It bears well, and the fruit is large, fair and excellent. More than one taster has exclaimed—“I never ate a better apple.”

Its excellence is the more remarkable on account of its being one of the *very few* European sorts that suit our climate. Some years ago we received from Bucl & Wilson, a considerable number of such as are most highly recommended by Lindley in his Guide to the Orchard and Fruit Garden; but with this solitary exception, they are not worth cultivating here. It is true that the King of the Pippins is beautiful, but it is too austere for our purposes.

Several things are necessary to constitute a variety of the *first class*. The fruit may be fine, but the tree comparatively unproductive. Such for instance is the case here with the *Newtown Pippin*. It is easier to raise five bushels of the *Stewar*, or the *Spitsburgh*, than one bushel of the former kind. It is a first rate apple in well grown specimens, but there our culture must end.

Ripening of Late, or Winter Pears.

At page 52 of our current volume, we mentioned the effects of an increase of temperature in ripening winter pears. This fall, when we gathered in our *Firgaltius*, part were put in a warm room, and part in an out house. The former ripened much sooner than the latter.

Seven's Genesee pear was much later than usual in coming to maturity. They turned yellow about the commencement of our autumnal frosts, and fell from the tree; but remained hard while they lay on the ground exposed to the cold. On bringing them into a warm room however, they soon became melting.—The *Beurre Diel* and several others, under similar treatment, were attended by similar results.

Neither apples nor pears ought to freeze; but the nearer they are kept to that temperature without freezing, the better they will keep; and we have no doubt that some autumnal pears may be kept until winter, or even until spring, in an ice house.

Many apples may be frozen hard without material injury, if the warriath be afterwards applied very gradually. For instance: if they are taken in a frozen state, not exposed to the sun, and buried in the ground. The intensity of the frost is of less consequence, than the manner in which it is removed; and if frozen apples were packed in ice, it is not improbable they would keep all the year.

But what we want chiefly to inculcate at present, is that the time that winter pears ripen will very much depend on the temperature in which they are kept.

To Mark Names on Fruit.

The Charleston Transcript recommends putting wax on the sunny side of half-grown peaches and nectarines, “in any desired shape or form;” and the wax will hinder the sun from coloring the part that is covered. When the fruit is ripe the wax may be removed.

A more convenient method however, may be adopted for marking pears and apples. Write on the fruit when it is gathered, with a black lead pencil, or a small stick not sharp enough to cut the skin, and the bruised part will soon change color. Where the fruit is not deeply colored, the writing will be as plain as if done with ink, and perfectly indelible. We have found this method very convenient and useful.

The Mediterranean Wheat.

We observe that the attention of farmers in the south-eastern part of Pennsylvania, is becoming more and more turned towards a new kind of wheat called the *Mediterranean*, the merits of which have been variously estimated; but as we have not seen this sort, we shall confine ourselves to laying the opinions of others before our readers.

From a writer in the *Farmer's Cabinet*, (Vol. 6 page 69,) we quote the following:

“Its diminutive ears, and short straw, its inequality of sample, and inferiority of flour, render it to me a very exceptionable variety; indeed, I wonder how any good manager would be content to grow ears two inches in length, yielding only twenty grains on an average, with straw so weak and short as to fall before the crop is ripe, and diminishing the size of the dung-hill nearly one half. I have examined many crops of this peculiar species of wheat, and am convinced in my own mind, that it is the real ‘*Tremois*,’ or French spring wheat, which as its name imports, becomes ripe in three months from the time of sowing, and of which I have seen hundreds of acres growing in Europe, particularly in the Channel Islands, Guernsey and Jersey, where it is a *vet*, chiefly on this account, a character for earliness which has sustained in this country and climate; common ripe under the same circumstances, ten days or a fortnight earlier than any other variety known among us, thus probably escaping the rust which is prettily so to fall on the late ripening wheat; but wherever it is sown in Europe, it is considered a very inferior crop, and is cultivated only on land that is either too poor or ill-conditioned to warrant more than half yield of other varieties.”

In the same paper, *Jabez Jenkins* of West Whiteland in Chester county, says in regard to the same kind of wheat:

“It appears to have escaped the Hessian fly and the rust. On a rich lot of two acres, I have harvested 1404 sheaves of usual size. The crop on two large fields is not heavy, owing it is thought to too large a growth of timothy that had been sown with it, but the yield is tolerable and the quality good.”

A correspondent of ours near Downingtown in the same county, says in a letter lately received:—“Our wheat in eastern Pennsylvania, will average about two thirds of a crop; but the lately introduced wheat called the *Mediterranean* has yielded nearly a full crop wherever it has been sown; and as yet it has escaped the attacks of the Hessian fly and the mildew. It makes good bread, though somewhat harsh, and weighs from 62 to 66 pounds to the bushel.”

Another of our correspondents in Bucks county who resides more than forty miles from the former under the date of 9 mo. 27, says: “A kind of re-shaff wheat with large kernels not unlike rye in shape and called the *Mediterranean*, has been sown in the vicinity for several years past. It is not liable to the ravages of the Hessian fly, nor affected by rust or mildew, like other wheat; and does not require such high manuring. It is fully as productive, and in many instances more so than our other sorts of wheat. It can be sowed early without danger of the fly, and is fit to harvest a week or more before the usual time. The flour made from it this season, is better and whiter than any we have had in our house for a long time. A very deep rooted prejudice prevails with many, against it, without ever giving it a trial.”

We should like to know whether this kind of wheat has been introduced into Western New-York, and so, in what estimation it is held?

Review.

“THE ORCHARD: including the management of wall and standard fruit trees, [and the forcing pit with selected lists and synonyms of the most choice varieties.” By Charles McIntosh. London, 1839 (Price unknown.)

This is a large duodecimo, very neatly printed, and containing eighteen handsomely colored plates, and numerous wood cuts, all executed with much taste

skill. It has good descriptions of *one hundred* of thirty-six varieties of the Apple, *eight* of the Apple, *fifteen* of the cherry, *twelve* of the fig, *five* of the pear, *nineteen* of the melon, *seventeen* of the nectarine, *seventy* of the pear, *twenty-six* of the peach with titles of many others, *thirty* of the pine apple, *forty* the plum, *twenty-one* of the strawberry, *twenty* was the grape, and imperfect descriptions of several other kinds. These descriptions are valuable, from the care taken by the author to seize on distinctive and permanent characters only. Some of them, of four lines, enable us much better to identify the fruits, than whole pages of loosely written stuff, from some writer of former years. We give the following as specimens of the authors descriptions:

"Gravenstein. Originated at Gravenstein, in Holstein, Germany, and with the Courtlandt Flat, is the best apple the continent can boast of. Size, large; somewhat oblong, with angles terminating in the stem; color, yellowish green, marked with red on the side next the sun; stalk, very short; eye, wide, sunk in a deep basin; flesh, pale yellow; flavor, very high and vinous; duration, from November till April; bit, extremely heartily, rather a shy eater; merits one of our first rate dessert fruits."

"Ginsel's Bergamot. [Syn. Brocha Bergamot, Anne Ruze, Joe's Bergamot.] Originated about 168, from a seed of the Autumn Bergamot, at Dandford Hill in Essex, the seat of General Gansel. Size, large; form, oval roundish; color, dull brown above, rather deeper brown next the sun; eye, small; stalk, short and fleshy; flavor excellent; duration, November and beginning of December; habit, though of English origin, it is much too tender to succeed as a standard: its merits, however, claim for it a place on the wall of every good garden."

The author, in addition to his own extensive and thorough knowledge, has availed himself of the assistance of Robert Thompson, of the London Horticultural Society, under whose eye a greater number of fruits have been proved and minutely examined, than at any other person. For this reason especially, a list of synonyms is very valuable.

A number of blunders, typographical and substantial, occur here and there, which we pass by, and merely give the following correct statements:—

"It is no unusual thing to see an American peach orchard containing one thousand trees growing as standards, as the apples do with us, and after the juice fermented and distilled, producing one hundred barrels of peach brandy. The Americans usually eat *apricots* or *clingstones*, while they reserve the melting *free-stones* for feeding their pigs."

"In the United States the stones of the peach are sown on a seed bed, [See.] In the fourth or fifth year, they produce fruit, and thus thousands of varieties are produced; not one perhaps in ten thousand is fit for the table." &c.

The work is, however, so far at least as the practical part is concerned, written with great judgment and accuracy, and notwithstanding the peculiarities of culture in England, it cannot fail of being of great value to every American cultivator of fruit. Accordingly, adapted to this country, would be still more valuable.

For the New Hampshire Farmer.

Shall Agricultural Societies be Sustained?

MESSRS. EDITORS:—A few days after the Fair of our County Agricultural Society, I was accosted in one of the streets of our village, by a very respectable farmer, with the following question, viz: "Would it be any, and if so, what advantage to me, to join the Niagara County Agricultural Society?" "Or, what is the use of such Societies?"

Being under an engagement at the time, and the circumstances not being exactly suitable for the discussion of so important a subject, I propose to answer the question through the medium of your useful paper. But I do not expect at all to advance any thing new, to the general agricultural reader. The subject has been presented in many interesting forms, and in the most glowing colors, by able and experienced writers; but the great body of the farming community have not read such articles, neither have they read any thing of the kind, except it were casually or incidentally. There has been a most remarkable stupidity and indifference on this subject. A general opinion or impression seems to have prevailed, that all was known that could be known of either practical or scientific agriculture; and therefore, instead of profiting by the experience of one another, we have rather sought to find fault with every thing not according to our previously conceived opinions. In short, Mr. Editor, as you have doubtless long since learned, we, as a community, are a most self-sufficient, self-willed, self-conceited race, always ready to teach, but never desiring to be taught!

Now what shall be done to break this charm? If you write at all you will not write to them, for they will not pay *one cent per week* for the best monthly agricultural paper which can be furnished. As an evidence of this fact, (if report do not lie,) the "Empire County" containing seven thousand farmers on the evening of the first day of their Agricultural Fair & Cattle Show, had furnished but eighty names as members, at a fee of 50 cents each! Eighty out of 7000! one out of every ninety. We mistake very much, if the "Empire County" does not furnish more worshippers of *Bacchus* than this!

But we most sincerely rejoice, that a better spirit prevails in some of the counties of the "Empire State." That here and there a green spot can be seen—that a waking up, and looking about, begins to be manifest. But I have wandered too far from my subject. The question to be answered, was—What is the use of Agricultural Societies?

1st. They serve to correct one of the greatest evils in the general management of our farmers, viz: that of cultivating too much land. The average crop of wheat throughout Western New York, will not probably exceed for the last two years, 15 bushels per acre, corn 30 bushels, potatoes 100 bushels, and grass 14 tons. Query. What would be the cost per acre, to make these same lands produce double the quantity, or the same quantity from one half the number of acres? The influence of Agricultural Societies is to test this question. By the act of our legislature to aid Agriculture, &c., funds are provided to be paid in premiums to those who raise the greatest quantity of produce at the least expense. The inquiry will arise in every mind, "How shall I manage such a piece of corn, for example, that I may obtain the greatest number of bushels at the least cost? How many times shall I plough it? How much, and what kind of manure shall I apply to it? How often, and in what manner shall I hoe it? How much horse labor shall I use, and what implements shall I use with the horse? The plough, cultivator, or neither? And again, how shall I harvest the crop?" Such like inquiries will naturally suggest themselves, and we shall adopt that course, which, in our various opinions, will be most likely to produce the desired result. And when we have found the best course to enable us to obtain a premium for the best crop, we have also the best course to enable us to enrich ourselves.

It will be noticed that the provisions of the act referred to, require the payment of the premium, not for the greatest quantity raised on an acre of land, but for the greatest quantity at the comparatively least

expense. I may put a hundred loads of manure to an acre of land, and spend the whole season in the tillage of that acre, and obtain therefrom 100 bushels of corn, or 400 bushels potatoes, or 50 bushels of wheat; when if I were to charge that crop with all the expenses thereof, it would perhaps cost me more per bushel than any neighboring crop would him, at one half the expense. Thus we see, that the most economical course is the one to be sought for, and not merely the raising of the greatest quantity per acre, but the raising of the greatest crop at the least comparative expense. The same principles are to be recognized in the matter of raising and fattening of stock. The object is not to see who will produce the largest or latest calf or ox, but what stock will fatten at the least expense; and what kind of feed is most profitably fed to cattle or swine. Also, the same rule should be applied, in awarding premiums for agricultural implements.

Now suppose our whole farming community. I mean every farmer, should carefully read an agricultural paper, should join the county agricultural society, and should apply himself, by reading, reflection, conversation, and experiment, for a course of ten years, according to the principles set forth in the said act, who do you suppose, Mr. Editors, would be the result? Should we not see the effect on the very face of nature? and especially on the face of man? Should we not see it in our buildings, in our fences, as well as in our crops? Should we not feel it in our very bones, as we return from our daily labor, to the house, on which no man has any claim for the erection thereof, and where with the happy family, we enjoy the fruit of our labors, and where no constable or sheriff can "molest or make us afraid."

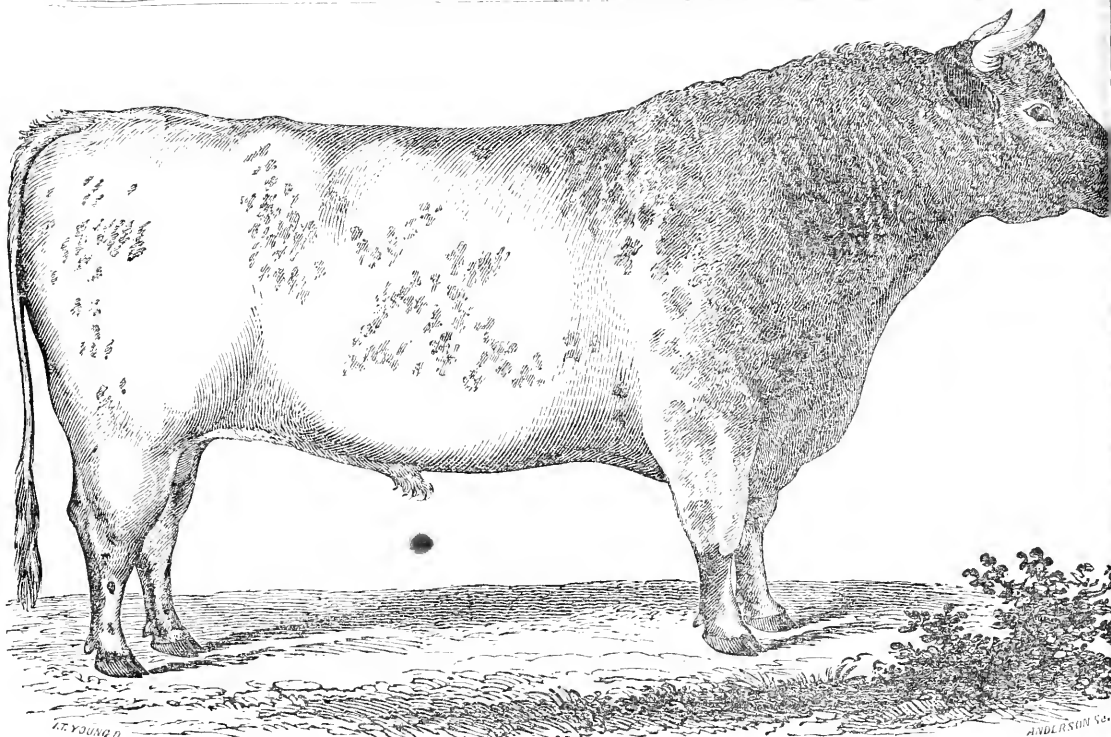
Again. The operation of agricultural societies under the present law, will lead farmers to keep accounts of their expenses and profits; a consideration of no small importance. He thus ascertains, not only what his wheat, corn, oats, potatoes, &c. cost him per bushel, but which is the most profitable crop. And the same practice carried out, will lead him to keep an account of his expenses for the support of his family, for his hired labor, improvements on his farm, buildings, &c.

Again. The formation and support of societies is the most efficient means of improvement in all the useful arts. It encourages a spirit of enterprise and emulation, it diffuses a knowledge of useful experiments, affords opportunities of social intercourse, and serves to dispel those illiberal feelings and groundless jealousies, which often exist in communities, and block up the avenues of friendly feeling and pleasurable enjoyment in a neighborhood.

The fruits of such societies, will be the improvement of our agricultural implements—the introduction of improved breeds of stock into every town and neighborhood—a proper rotation of crops will be better understood—manures will be greatly increased and more understandingly applied—and a general spirit of inquiry will be awakened, and a spirit of commendable competition will be encouraged. We not only calculate and reason that such would be the case, but these statements have been proved true to a demonstration, in the operations of many societies, both in this country and in Britain.

Yours, &c., as ever,
LOCKPORT, N.Y., 1840. NIAGARA.

Next to the love of flowers is the love of birds.—Teach your children in mercy to spare the nests of the harmless little birds, and if you have a heart to be thankful, it will rise up in union with the little songster's coral, to thank your lot is cast in such a pleasant vale of flowers and singing birds. These are some of the many things provided to lighten the toil of labor, and it is only a vitiated taste acquired from a false system of education, that prevents us from deriving a great deal of happiness from such small accompaniments of the journey of life.



IMPROVED SHORT HORN BULL "ARCHER."

THE PROPERTY OF J. M. SHERWOOD, ESQ., AUBURN, N. Y.

Obtained the first Premium at the Fair of the New York State Agricultural Society, at Syracuse, September 29th, 1841.

"ARCHER," is in color mostly white, with a roan head and neck—his body has some roan spots—was bred by P. Rotch, Esq. Butternuts, Otsego Co., N. Y. Calved, 15th of June, 1837. Sired by ROTCH.

Dam, Adalza, by Frederick, (*Herd Book*) 1060.
 G. G. Adalza by Orpheus, . . . 473.
 G. G. "Alpide by Alfred, . . . 23.
 G. G. G. "Strawberry by Winsor, . . . 693.
 G. G. G. "Old Dairy by Favourite, . . . 252.
 G. G. G. G. "Old Dairy by Punch, . . . 531.
 G. G. G. G. "Old Dairy by Hubback, . . . 319.

ROTCH, sired by Patriot, (*Herd Book*) 542.
 Dam, Romp by Admiral, . . . 1618.
 G. " Moss Rose by Young Denton, . . . 93.
 G. G. " Rosa, by Young Denton, . . . 93.
 G. G. G. " Ruby by Denton, . . . 198.
 G. G. G. G. " Old Red Nose by Frunne'l, . . . 69.

*. We regret that the absence of Mr. SHERWOOD has prevented him from inspecting a proof of the above Engraving. We have spared no pains to have it correct.—Ers.

Allegany Co. Agricultural Society.

At a meeting, held for the purpose, in Angelica, October 6th, 1841, an Agricultural Society was formed for the County of Allegany. The following persons were elected officers for the ensuing year:

WILLIAM G. ANGEL, President.

Vice Presidents.—John Ayres, George Lockhart, Orin Stillman, James Wilson, jr., Andrew Baker, William Van Campen, Stephen Wilson, jr., John Bales, Martin Butts, Stephen Mundy, Rodman Freeborn, William A. Stacey, Edward H. Johnson, Peter Leroy, David T. Hamilton, Josiah Uiter, Isaac Van Austin, John White, Jabez Burdick, Luther Couch, Samuel C. Clark, John Seaver, Asa K. Allen, Jacob Clendening, John Jones, James Perkins, James McCally, Abraham Middaugh, Jesse B. Gibbs, Joseph French.

Recording Secretary.—A. S. Diven.

Corresponding Secretary.—Ransom Loyd.

Treasurer.—Alvin Burr.

Mangers.—Vial Thomas, Stepto Woodruff, Chas. Maxson, Brice Carr, Hiram Harmon, John Simons, William Brown, James Mithews, Eli Lesure, Noah Smith, Elias Smith, Levi Latham, William Duncan, Moses Parsons, Stephen Wing, Hollis Scott, Samuel Jones, Reuben Weed, Hiram Wilson, Oliver M. Russell, Samuel S. White, Calvin B. Laurence, Isaac Andrews, Joshua Rathbone, Moses Smith, Orleton F. Messenger, Abram J. Lyon, William Knight, John Lockhart, Daniel Willard.

Wayne County Fair and Cattle Show.

At Newark, October 16, 1841.

We find the following remarks appended to the list of premiums in the Wayne Co. Standard:

THE FAIR.—Saturday was a great, a glorious day for Newark, and a proud one for this county. The Fair which came off here on that day, was, to say the least, more than ordinary. The weather during the week preceding Saturday, was April-like, showers and sunshine, with a considerable more of cloudy markness than sunshine, and consequently the roads were somewhat wet and muddy. These circumstances seemed to impress our villagers in the morning with the belief that the Exhibition would prove to be rather a "slim affair"—yet contrary to the expectations and forebodings of all, and in accordance with their wishes, the overhanging clouds withheld their showers, and the attendance of people and the number of stock and articles exhibited were far greater than had been anticipated.

The Wayne County Agricultural Society is yet in its infancy. It is, to three quarters of the farmers of this county, what may emphatically be termed a "new thing"—yet with its present flattering prospects, and the awakening interest that it is apparent is being taken in it, bids fair to be one of the first agricultural associations in the State.

Murrain in Cattle.

"A Grain of prevention is worth a pound of cure," says your correspondent N. in the October num-

ber of the Farmer, and in that I perfectly agree with him. I think it is probable that ashes may be of some use as a preventive of Murrain, but from my observation, I believe that salt petre is a much better article for the purpose. The proper quantity is, a pece about the size of a large kernel of corn, given once a week. A neighbor of mine has used this mode of prevention for twenty years, with almost entire success.

When cattle are attacked with this deadly disease, I would recommend giving them, say, 2 oz. of Gum Gamboze, dissolved. This is a powerful physic; and it is very necessary to get something to pass the animal. I believe that the Dry Murrain always precedes the Bloody Murrain, and is the cause of this last and most fatal disorder, which is often quite prevalent in the Western country.

WILLIAM WALLACE.

Barcelona, Richland Co., Ohio.

Annual Meeting of the State Society.

We invite the attention of our readers to the notice in another column, of the Annual Meeting of the N. Y. State Agricultural Society, at Albany, January 15th and 16th, and to the list of Premiums then to be awarded. All who can, should attend.

Culture of the Premium Crops.

I intend in this and forth-coming numbers to publish the statements respecting the mode and expense of culture, value and use of product, &c., of numerous extraordinary crops for which premiums have been awarded the past season. From the publication of this kind of information we believe will derive some of the greatest benefits to be derived from agricultural societies. We cannot devote much space to subject this month, but will commence with the Root Crops.

ROOT CROPS.

Carrot raised by F. P. Root of Sweden, Monroe Co.—1200 bushel per acre.—Soil, black vegetable loam—rather moist—previous crop, Wheat. The land was ploughed once in the fall and twice in the spring, previous to sowing. Only a part of the land manured—that part produced the largest roots. Seed was sown on the 16th of June. (Other particulars not stated.)

Carrot raised by Geo. Sheffer, of Wheatland, Monroe Co.—552 bushels per acre.—Black clay loam, (Genesee Plains) bears drought yet extremely well. Previous crop, corn; no manure. Sowed at the rate of two pounds of seed to the acre, in rows 2 feet and 3 inches apart, and left the plants 6 to 10 inches apart in the rows. Considered the roots worth 12½ cts. per bushel—feeds them to pigs, principally.

SUGAR BEETS AND MANGEL WURTZEL.

Sugar Beet raised by Geo. Sheffer, of Wheatland—1100 bushels.—**Sugar Beet raised by Geo. Sheffer, of Wheatland—1100 bushels.**—**Sugar Beet raised by Geo. Sheffer, of Wheatland—1100 bushels.**—Soil the same as above; previous crop, Potatoes; manured with 25 loads of well rotted manure acre, ploughed under in the fall. Ploughed once in spring when ready for planting—middle of May. Mode of preparing the ground, planting, &c., the same as described hereafter for Carrots. Sowed three loads of seed per acre. Feed these roots to my cows and cattle—consider them worth about the same as the Bays.

CARROTS.

Carrot raised by George Sheffer—6533 bushels per acre.—Soil the same as above; previous crop, Potatoes; manured with 25 loads of well rotted manure acre, ploughed under in the fall. Ploughed once in spring when ready for planting—middle of May. Mode of preparing the ground, planting, &c., the same as described hereafter for Carrots. Sowed three loads of seed per acre. Feed these roots to my cows and cattle—consider them worth about the same as the Bays.

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them with a spade and put them in a cellar.

The following is as nearly as I can estimate the expense of raising and value of my crop, of one acre of carrots.

Preparing the land and planting, 5 days work.	
Hoeing and thinning 1st time, 9 do.	
" " 2d " 6 do.	
" " 3d " 6 do.	
" " 4th " 4 do.	
Digging and securing crop, 10 do.	

Say 40 days labor at 75 cents per day,	\$30.00
Two pounds clean carrot seed,	3.00

Expense of crop, \$33.00

I feed my carrots to horses, and consider them worth at least half as much as oats.

Say 6533 bushels at 1 shilling and 3 pence	102.10
Value of the tops for fall feeding, at least	10.00

Total value of crop,	112.10
Deduct expense, as above,	33.00

Nett profit of the crop, \$79.10

GEO. SHEFFER.

Wheatland, Monroe Co., N. Y.

Remarks.—Our readers will perceive that Mr. Sheffer has omitted to reckon the rent of the land and the value of the manure used for the above crop. These items we should judge, would reduce the nett profit to about *Sixty five dollars*. A liberal sum for one acre.—Eus.

(For other premium crops next month.)

Culture of Silk in Families.

We have received a communication of some length from Thomas Levermore, of Venice, Cayuga county, detailing in full his first experiment in the culture of silk on a small scale, which our limits will not permit to give entire. Our correspondent did the whole of the work himself, and kept an accurate account of the time required in attendance upon the worms, an abstract of which is here given, with cost and proceeds:

Time feeding, &c.	103 hours.
Rearing frame, &c.	7 "
Gathering cocoons and picking them clean . . .	3 "
Drying them.	2 "

which at 16 hours a day are 11 days 5 hours—	
which at only 30 cts a day is.	\$5 75
1 year interest on cost of trees,	50 "

	\$6 25
Cr.	

Half a bushel and 2 quarts cocoons, at.	\$3 00
The Auburn price.	1 75
State bounty.	26 "

	\$3 04
Loss.	\$4 21

The mulberry used was the white Italian and Mediterranean—mostly the former—and our correspondent adds, "I find by this experiment 10,000 worms would be full employ for one person, which, if no casualties occurred, would produce 3 bushels of cocoons; these at the Auburn price would be 2 dollars, and the state bounty would be \$1.35, making \$3.35 for the labor of one person for at least 40 days; allowing nothing for trees and attending them, interest on their cost, and on the ground, &c. and without any allowance for time in obtaining the state bounty. And even if it could be attended to by the wife and children of a farmer, to save expense of hiring, even then the pay is so small as not to be worth the additional labor—leaving out the loss by neglect that the butter and cheese would sustain—as most females, particularly the wife, have as much work as can usually be accomplished. From this trial I am fully persuaded that silk cannot be raised in a small way in a farmer's family, to any advantage—though it may perhaps answer better on a large scale as a business by itself, as with many other things."

We would merely remark, that with all the disadvantages of a first experiment, imperfect fixtures, &c.,

we think this is perhaps quite as successful as could have been expected. The silk business must of course be like every other pursuit—it must require thorough experience, strict economy, close application, and everything in good order, to be profitable—and those who expect to jump at once into wealth by this means, will find themselves as greatly mistaken, as the farmer would who, without knowledge, without tools, without seed and without live stock of modern kinds, should dive at once into the wilderness, and attempt at once to compete successfully with the products of our large markets.

Agriculture at Fairs—the Right Spirit Reviving.

The Autumn of 1841 has been peculiarly distinguished by the attention that has been given to the cause of Agriculture. The great Fair of the State Agricultural Society at Syracuse, the Fair of the American Institute, in this city, numerous Fairs of county Societies in this State and of other Agricultural Societies in the State of Massachusetts, Connecticut, Pennsylvania, and several other States, have exhibited products of the soil, and improvements in the mode of cultivating it, never before equalled in this country. These associations have also encouraged, attended and conducted by the very ablest and best of men in the country; and we cannot doubt have sent abroad a spirit that will exercise a most wholesome influence upon the pursuits, the habits, and character of the people of this country.

The natural business of the American people is agriculture. It is the basis of our wealth and independence. This is evident from the extent, fertility and productiveness of our soil. The national and individual welfare of our people requires that agriculture should keep the position which nature has assigned it, in advance of all other cultures. We would not depress manufactures and commerce, but would let them depend upon the products of the soil, and be sustained thereby. It is impossible that they should be successful to a proper extent, if regulated by any other standard.

It is gratifying, therefore, to see the lively interest every where awakening in the cultivation of the earth. It is an honest, independent and a healthy business. It was grossly neglected a few years since: farms were sold in city lots on speculation, instead of being planted, as they should have been, with corn, potatoes and turnips: our people were so deluded as to buy grain from the shores of the Black Sea, rather than raise it on their own land. Depravity of morals, commercial ruin and general distress followed as the inevitable consequences of this great error. We are glad to see the people returning home from their wanderings, filling their barns, and houses and stores with the products of honest industry, and rejoicing in the sturdy independence of a thrifty farmer. Long may it be before our fertile "potato patches" and "cabbage yards" are again laid waste by being surveyed and photographed into unwholesome cities.

It is the duty of the press and of our public men to encourage the movement of what may be considered our great national business, agriculture. There is no danger of overdoing it. Who ever heard of over-trading in this branch of business? No matter how extensive our surplus products may be, there will be a market for them in some part of the world. The business of exporting and exchanging them will support a vast commercial interest, and a large manufacturing interest will also grow up as a natural and necessary incident. But agriculture must take the lead; in it is the origin of a all prosperity; before we begin to trade we must produce something to trade with; and we must produce the raw material before we set up factories to improve it.

No matter, therefore, how much we stimulate by proper means the cultivation of our soil, there is no danger but that commerce and manufactures will follow fast enough of their own accord. They are more laborious than agriculture, to excess and over action. Their results are more splendid, and ambitious adventures are more easily captivated by them. There is a constant tendency, especially in commercial nations to go too fast. No apprehension need therefore be felt lest the business of agriculture should get too far ahead; the difficulty is in keeping it sufficiently advanced. Let commerce be regulated by it, dealing only in the surplus values produced in the country, and looking to no fictitious and temporary stimulants, and how soon the business of the country in every department would become settled, stable, regular and permanently profitable. We should bear in mind no ruinous revolutions and fluctuations, and should have no troubles with a depreciated currency.—N. Y. Sun.

Livingston County Fair and Cattle Show.

(At Genesee, October 22d, 1841.)

The Secretary informs us that, although the day was stormy, and the roads muddy, the exhibition was such as to make it a meeting of great interest. The display of stock was unusually large and fair. The numerous pens and ample grounds set apart for the exhibition were at an early hour filled, and the committee for that purpose had to construct a range of new pens to contain the incoming throngs of cattle, sheep and swine. A great many very noble specimens of stock were exhibited. A fine pen of Holderness owned by Mr. Skinner of this town; a Teeswater of Mr. Komp of Groveland; several Devons and a great many Darhams from several towns were exhibited. The improved Short Horn Durham breed seemed most in favor. There was also a fine show of Swine; of the Berkshire, Leicesters, and Byfield breeds and crops.

The Butter exhibited was very abundant and of matchless quality. Some very beautiful specimens of Needle Work. Domestic Cloth and Carpeting were also exhibited and excited much admiration.

Upon the whole, the exhibition, considering that it was the first of the kind, was highly creditable to the county. And if the Society follow up this first effort with becoming zeal the next exhibition, which will embrace a greater range of articles, will show that Livingston will not be more famous for the fertility of her valleys than for the richness and variety of her productions.

The following Premiums were awarded:

- 1st best Bull 2 years old and over, \$15, David M. Smith, Avon.
 2nd best Bull do \$3, E. A. Le Roy, Caledonia.
 3rd best Bull do \$5, Holloway Long, York.
 Best Yearling Bull \$3, David Brooks, Avon.
 2d best Yearling Bull \$5, John R. Murray, Mount Morris.
 Best Bull Calf \$5, Daniel H. Fitzhugh, Groveland.
 Best Pen not less than 3 Calves \$5, Thomas Tyler, Genesee.
 2d best Pen not less than 3 Calves \$1, David Brooks, Avon.
 Best Cow \$10, David Brooks, Avon.
 2d best Cow \$5, Thomas Newbold, Caledonia.
 Best Heifer 2 years old \$5, Isaac Casey, York.
 2d best Heifer 2 years old \$3, Russell Socking, York.
 Best pair Working Oxen \$10, Roswell Root, York.
 2d best pair Working Oxen \$3, Allen Ayrault, Genesee.
 Best pair 3 year old Steers \$5, Holloway Long, York.
 Best pair 2 year old do \$5, George Root, York.
 Best Stallion \$10, David Brooks, Avon.
 2d best do \$5, Robert Whinley, Avon.
 Best brood Mare \$8, Pell Teed, Leicester.
 2d best do \$4, Reuben Squier, Genesee.
 Best Spring Colt \$5, Pell Teed, Leicester.
 2d best do \$3, Reuben Squier, Genesee.
 Best pair Matched Horses \$10, William A. Mills, jr., Mount Morris.
 2d best pair Matched Horses \$5, J. S. Wadsworth, Genesee.
 Best long Wool Buck \$6, Mr. Oliphant Mt. Morris.
 2d best do \$4, Thomas Parsons, York.
 3d best do \$2, Richard Peck, Luna.
 Best fine Wool Buck \$6, Roswell Root, York.
 2d best do \$4, Charles Colt, Genesee.
 3d best do \$3, Reuben Squier, Genesee.
 Best Pen not less than 5 long Wool Ewes \$5, Allen Ayrault, Genesee.
 2d best do do William Squier, Genesee.
 Best Pen not less than 5 fine Wool Ewes \$5, Charles Colt, Genesee.
 2d best do \$3, Reuben Squier, Genesee.
 Best Bar \$5, N. Hathaway, Genesee.
 2d best Bar \$5, T. Tyler, do.
 Best breeding Sow \$8, William W. Wadsworth, Genesee.
 2d best breeding Sow \$5, Sullivan Drew, York.
 Best Plough \$5, E. G. Holliday, Sparta.
 2d best Plough \$3, none offered.
 Best Irkin of Butter \$4, David Brooks, Avon.
 Best 20 lbs. Roll do \$2, Mr. S. A. Hooper, York.

- Best 50 lbs. Cheese \$3, Thomas Tyler, Genesee.
 Best pair fat Oxen \$10, William A. Mills, Mount Morris.
 1 Devon, 3 Ottomans, needle work, \$2 50, Mrs. Campbell Harris, York.
 1 work'd Chair and Green, needle work, \$2 50, Mrs. John Young, Genesee.
 Plaid Flannel \$3, Mrs. O. D. Lake, Mt. Morris.
 Black and White Flannel 2 do do
 Moscow stripe Flannel 3, and Full Cloth 2—\$5, Mrs. Esther Harris, York.
 2d best full cloth \$1, Lyman Turner, Genesee.
 Stocking Yarn \$1, Mrs. Cornelius Shepherd, Genesee.
 Skeins Silk \$1, Mrs. McVean, York.
 2 pieces Carpeting \$1, Pell Teed, Leicester.
 Entry and Stair Carpeting \$4, Mrs. G. Nowlen, Genesee.

- Specimen of Glass \$2, Mt. Morris Factory.
 1 work'd Wool Laid \$3, Charles Colt, Genesee.
 B. St. Leicestershire Lamb \$2, William Squier, do.
 2d best do do \$1, Richard Peck, Luna.
 Best Yearling Colt \$1, Jonathan Miller.
 Best 2 year old Colt \$2, Robert Wanley, Avon.
 Best improved Fanning Mill \$1, Pell Teed, Leicester.
 Improved Clevis \$1, E. G. Holliday, Sparta.
 Immediately after the reports of the committees were read and the foregoing premiums were declared, the Society proceeded to the choice of officers for the ensuing year.

The following officers were elected:—

JAMES S. WADSWORTH, President.

EDWARD A. LE ROY, Vice Presidents.

RAY L. BLAKE, Vice Presidents.

PAUL GODDARD, Vice Presidents.

C. H. BRYAN, Recording Secretary.

FELIX THACY, Corresponding Secretary.

ALLEN AYRAULT, Treasurer.

MANAGERS.

Holloway Long, York. Jeremiah Horsford, Leicester.

William A. Mills, jr., Mt. Morris. William Scott,

Sparta. Harvey S. Tyler, Springwater. John Hen-

derson, Genesee. Augustus Gibbs, Livonia. Asahel

H. Warner, Luna. D. H. Fitzhugh, Groveland. Ira

Merrill, Avon. Charles Colt, Genesee.

Niagara Co. Fair and Cattle Show,

(At Lockport, Oct. 22d, 1841.)

The following account of this exhibition from the pen of our old friend "Niagara," accompanies the list of premiums published in the Lockport paper. We are happy to learn that this fine county is also waking up to a sense of her true interests.

Although this was the first attempt at any thing of the kind ever witnessed in this county, and though the funds were exceedingly muddy in consequence of recent rains; yet the gathering of the enterprising farmers and others of the county was very numerous, even beyond the expectation of any. The day was favorable, for the season of the year, and the multitude were apparently never in better spirits. As such a meeting was a novelty with us, many attended merely as "lookers on," yet words, actions and looks bespoke mutual gratification and pleasure, and this "farmers' holiday" was pronounced by more than one, a good day for Niagara. Politics and sectarian distinctions were apparently unknown or forgotten, and an expression of kindly, fellow feeling was uniformly manifest. The show of animals, although not so numerous as in some of the eastern and middle counties of the state, was very respectable, not only in number, but in grade and appearance, and afforded the most gratifying evidences of improvement, and that our farmers and herdsmen are not asleep, or indifferent on the subject of cattle husbandry.

The cattle exhibited were nearly all of them crossed between the Short Horn, Devonshire and the native breeds. Although the frosty nights, rainy days, and muddy roads, had rendered their appearance less clean and beautiful than it otherwise would have been, yet we venture the opinion that many of them would not suffer in comparison with the best animals in some of the older counties. There were several calves of improved breeds which excited much attention, some five or six yoke of working oxen were presented, of the most stately and beautiful appearance, and were much admired.

The number of horses, &c., on the ground was very satisfactory, and better pairs of matched working horses, such as the farmer wants, can hardly be found.

Of the swine exhibited, some were specimens of very good Berkshires, Chinas, &c., but the show was not very numerous, nor as good as may be expected in future years. Enough was to be seen however, to

convince the observer that our pork makers were determined to improve their breeds of porkers.

The different varieties of sheep, were several of them represented. The Merino, Saxons, Bakewell and South Down were by no means indifferent specimens of these varieties, some of which attracted much notice. One buck introduced by Mr. H. C. Soumeier, was very much admired on account of its fineness of the wool and size of the carcass. A full blood South Down Buck exhibited by Mr. J. W. Beck, of Canbria, presented a good combination of the most desirable qualities for the same grade, in superior quality, and a fair quantity of wool, with a size of carcass and a robustness of form showing a strong and vigorous constitution. There were other pens perhaps equally deserving, which I did not particularly notice.

The show of vegetable products, such as beets, carrots, pumpkins, squashes, &c., were such as to prove that the soil and cultivation of Niagara, (some per cent,) are not surpassed anywhere. A sugar beet exhibited by Mr. E. W. Smith, raised on as hard an clay soil as can be found, weighed 224 pounds, showing what may be done by cultivation. Several specimens of cauliflower, also raised on the same ground, were most splendid. Whitehead and Canbria furnished pumpkins weighing 49 pounds and upward. Squashes large enough to fill a half bushel measure were exhibited by Mr. Atwater, of Lockport.

The specimens of wheat and corn, oats and potatoes, were admirable. As fine samples of wheat can be found in the world, were exhibited; corn at oats at the rate of 90 bushels per acre, and potatoes the rate of 400 bushels per acre, and that too, without any reference to an agricultural exhibition, give some evidence at least, that our border county contains the soil, and the cultivators thereof, which will not suffer in comparison with many others which are celebrated. Notwithstanding great credit is due to our yeomanry, to our breeders of cattle, horses, sheep and swine, yet a word of praise not a whit less, due to the "ladies of the farm house," many of who graced our numerous assemblages, not only with the presence but with the work of their hands. The exhibition of carpets, flannels, woolen yarn, stocking socks, &c., &c., were all respectable, and some of very much admired. But in the article of butter, there were many samples of superior excellence. One of the viewing committee remarked to me, that he had served in the same capacity 14 years, in a western county, and that he never had seen so many perfect samples of butter, a fact reflecting much credit upon this branch of household manufactures.

When we consider that this was the first effort the kind ever attempted by us; that our society was organized all near the last of June,—that the 1st of premiums was not made known till the middle July, so that no stock, or vegetable could have been raised, or cultivated in reference to such premiums, what may we not expect when our society shall have attained years of maturity and experience.

Yours, &c.,

NIAGARA.

Lockport, October 25, 1841.

The election of officers for the ensuing year, which took place on the day of the Fair, resulted as follows:

WM. A. TRENSEND, President.

DAVID S. HURD, Vice President.

JOHN GOULD, Jr., V. President.

WM. PARSONS, Secretary.

WM. O. BROWN, Treasurer.

Executive Committee.

CAMBRIDGE—Thomas Comstock, D. W. Cropley, H. McNeil.

HARTLAND—C. H. Skeels, Abner Kuidge, Ha. Harrington.

LOCKPORT—Joel McCollum, Jacob Gaunt, Riv. Stevens.

LEWISTON—Asahel Lyon, Rufus Spaulding, Pheto.

NIAGARA—Parkhurst Whitney, C. H. Wynn, Elphinst Gilet.

NEWFANE—James W. Smer, Peter McCollum, W. Merritt.

PORTER—J. C. S. Ransom, J. Clapsdille, Jac. Mort.

PENDLETON—John Baker, George Hawley, Am. Parsons.

ROYALTON—Win. Freeman, Erasmus Hurd, V. Carpenter.

SOMERSET—M. S. Douglass, Peter Hleas, J. V. Bowers.

WILSON—Daniel Dwight, Daniel Holmes, Mor. Johnson.

WATERBURY—N. M. Ward, J. Greeney, H. Mil.

The Farmer.

If I was asked who belonged to the privileged order of our land, I should reply, the farmer, for no other reason than that he is rarely ever the victim of those fluctuations of trade and the currency—and that he is entirely relieved in the sale of his products from the evils of that credit system to which almost every other class of the community is subjected.

Whether the price of the necessities of life be high or low, it is all the same to the farmer so far as he produces them for his own consumption. His surplus, unlike the wares of the tradesman, or the products of the manufacturer and the mechanic, will always command cash, and on that account it is at all times free from those assessments which the credit system never fails to impose on the capital and products of the other classes of community; in fact it is always the farmer's own fault, and it can never be said that it was an evil incidental to his profession, if he is ever found linked with bankruptcy, or his substance diminished by bad debts.

Look at the poor unfortunate miller and the produce-buyer, growing up under the hot-bed influence of Banks, which gives an additional stimulus to their already too active gambling spirit. They are the farmer's victims.

Look at the clergyman, faithful and gifted as he may be in teaching those lovely lessons which make man godlike; yet is he hardly sure from one year to another of a place whereon to lay his head.

Look at the lawyer, now staying, unless he can get practice in that juries court, whose title burlesques the name of equity.

The merchant and the trader encumbered and paralyzed by competition, bad debts, embarrassment, bankruptcy. A victim of the credit system and bankulations.

The mechanic, felony eating out his substance or flagrating his fair fame, in the shape of a States Prison brother;—often reduced to the hard necessity of making his employer rich before he can get his pay; in a career is too often one of labor and embarrassment. But the farmer with the staff of life in his barns, sheep on his hills, and pigs in his pen, laughs to scorn the petulant ills of life; 'tis true, he has his cares, but without them he would be much to be pitied. If every thing was done to his liking without his own supervision, the devil or some demon passion would become his master.

"Making his abundance, the means of want."

The industrious, provident farmer has the earth for his chemical laboratory, which, in common with his glowing vegetable surface teaches him many lessons. Flora's his handmaiden, and Ceres and Pomona shed their bounties upon him, making him nature's nobleman.

S. W.

Items.

Condensed from Exchange Papers, &c.

GREAT HEIFER.—A heifer, raised by Col. Paxton, of Colombian county, Pa., was recently exhibited at Philadelphia. She weighed three thousand pounds, is half blood Durham, and was sold to her present owner for one thousand dollars. She is five years old. This shows the great advantages which farmers would derive from crossing their native cattle with good full blood Durhams.

INDIA COTTON.—A lot of 100 bales of cotton was sold in the summer in London at 8½d. per lb., being the first shipped from Madras, from the new English plantation.

CARRIAGE SPRINGS MADE OF AIR.—Allen Putnam, of the New England Farmer, says that H. L. Ellsworth, (who is at the head of the patent office,) informs him that he lately signed a patent for a man to construct springs for rail cars so that the passenger

may read and write without any inconvenience; and that he rode in a car, constructed with such springs, containing 80 passengers, which fully answered the expectations and promises of the patentee. It appears that the spring is made by using upright 12 inch cylinders, containing air condensed to one-thirteenth of its usual bulk, on which a piston rests; but how the air is kept completely confined by this piston, while the latter plays freely, we cannot fully understand, as it is unexplained.

CORN OIL.—In Indiana, where corn is worth only 10 cents a bushel, lamp-oil is made from it, by grinding the corn, and fermenting it with malt; the oil rises, and is skimmed from the surface, and the meal fed to hogs.

TREES.—In Japan, there is a law, that no one can cut down a tree, without permission of the magistrate of the place and even when he obtains permission, he must immediately replace it by another.

CHEAP ROOFS.—A correspondent of the Farmer's Cabinet, says, that if rafters, are covered with kiln-dried half-inch boards, closely fitted at the edges, and these with sheathing paper, (such as is used under the copper of ships,) with a coating of tar added, an excellent roof is formed that will last many years. That the following composition was used in this way for a roof, twenty years ago, which is now as good as when laid: Eight gallons tar, two gallons Roman cement (water lime), five lbs. resin (rosin we presume), and three lbs. tallow; boiled and very thoroughly stirred, laid on the roof very evenly with a brush while hot. Sprinkle this while hot with sharp sifted sand, when cold apply another coat of tar, and of sand; and one coat of tar in six years.

An incombustible wash for the above is made by mixing six quarts of dry, water, slacked, sifted lime, with one quart of fine salt, and adding two gallons water, boiling and skimming it. Add to five gallons of this, one pound alum, half a pound of copraes, and slowly half a pound of potash, and four quarts fine ship sand. It may now be colored as desired, and applied with a brush. It is said to be as durable as stone, will stop leaks, exclude moss, and is excellent on brick work. Try it.

BUDGING ROSES.—Dr. Van Monro buds roses in June, so that they grow, and frequently blossom the same year. He prepares the young and unripe wood by separating the leaves, leaving only the foot stalks; two weeks after the buds are swollen and fit for insertion; at the time the bud is put in, the stock is cut off six inches above it. They are bound with bass matting, previously drawn through a solution of alum and white soap, and dried, which completely excludes water.

TO REMOVE OLD PUTTY.—In taking out broken window glass, nitric or muriatic acid will soften the putty at once.

TRANSPLANTING EVERGREENS.—Pines and spruces are judiciously considered a great ornament in door yard scenery, and few ever succeed in transplanting them successfully. The following mode, copied from Downing's late admirable work on Landscape Gardening, though not altogether new, is excellent, and we hope many will be induced to practice it at this season of comparative leisure. "The trees to be removed are selected, the situations chosen, and the holes dug, while the ground is yet open in autumn. When the ground is somewhat frozen, the operator proceeds to dig a trench around the tree at some distance, gradually undermining it, and leaving all the principal mass of roots embodied in the ball of earth. The whole ball is then left to freeze pretty thoroughly, (generally till snow covers the ground,) when a large sled is brought as near as possible, the ball of earth containing the tree rolled down it, and the tree set in its new position."

to the hole previously prepared, where it is placed, in the proper position; and as soon as the weather becomes mild, the earth is properly filled in around the ball." When skilfully performed, says Downing, this is the most complete of all the modes of transplanting, and the trees scarcely show, on the return of growth, any effects from removal.

Germinating Seeds Under Colored Glass.

The following remarks by "Mr. Hunt, the Secretary of the Royal Polytechnic Society," in England, relate to a most curious discovery; and, one which may prove very useful to the cultivators of rare exotics. We hope some of our readers will be stimulated to repeat the experiments, and to send us the results.

"It is scarcely necessary to explain that every beam of light proceeding from its solar source, is a bundle of different colored rays, to the absorption or reflection of which we owe all that infinite diversity of color which is one of the greatest charms of creation. These rays have been long known to possess different functions.

"The light which permeates colored glass partakes to some considerable extent, of the character of the ray which corresponds with the glass in color; thus blue glass admits the blue or chemical rays, to the exclusion, or nearly so, of all the others; yellow glass admits only the permeation of the luminous rays, while red glass cuts off all but the heating rays, which pass it freely. This affords us a very easy method of growing plants under the influence of any particular light which may be desired.

"The fact to which I would particularly call attention is, that the yellow and red rays are destructive to germination, whereas under the influence of violet, indigo, or blue light, the process is quickened in a most extraordinary manner.

"The plants will grow most luxuriantly beneath glass of a blue character; but beneath the yellow and red glasses the natural process is entirely checked. Indeed, it will be found that at any period during the early life of a plant its growth may be checked by exposing it to the action of red or yellow light.

"It is with much satisfaction that I find the results to which I have arrived, corroborated by Dr. F. R. Hornor of Hull."

Blue glass for hot-beds could be very conveniently employed.

How to Have Good Peaches—Indian Corn.

Much has been said and written about preserving the life and fecundity of peach trees. From the great success attending the recent practice which has come under my observation, I am inclined to believe that keeping the ground under the trees clear from grass and weeds, and loose and mellow by continual working, with a judicious application of manure, will do more towards preserving the tree and improving the flavor of its fruit, than all the nostrums in the world.

It is said that the coffee tree can only be made profitably fruitful, by adopting the above plan. A coffee planter would as soon allow his yard and planting patches to overrun with weeds as his coffee grounds.

I am much gratified to see of late a more lively interest in the better cultivation of that King of the vegetable kingdom, Indian corn. If it is true, that stalks alone, can be more profitably cultivated for sugar than sugar beets, as affording more saccharine matter, and requiring less outlay of capital and expense in the manufacturing process, then truly a happy new era has arrived in the rural economy of the north and west, which will give wealth and independence to the great corn growing region of the great West.

The red blazed is the favorite variety of corn among the masterly corn growers of Oneida Co.—it has a small cob and large kernel. It is earlier than the Denton, and grows larger in Seneca than in Oneida.

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fact and manure used upon it; the quantity of manure the present season; the quantity of seed used; the time and manner of sowing, cleaning and harvesting the crop; the amount of the crop determined by actual measurement; and the expense of cultivation. The land shall be measured by some sworn surveyor, and the claimant of the premium, with one other person shall certify to the above particulars.

Applicants for the premiums on butter, cheese and farm crops, must make known their determination to *LESLIE TUCKER*, Albany, (if by letter, post paid,) on or before the first of January next, and the parcels deposited in such place in Albany as the Ex. Committee may hereafter direct, on Tuesday morning the 18th of January, before ten o'clock, at which time the committee will proceed to examine the lot offered for premiums.

Hints for the Month.

Winter is now upon us—and the farmer must be diligent to secure what he has gained by the labor of summer. Flocks and herds need close attention, or they will soon lose much that has been gained by half year's care.

Animals thrive rapidly in warm weather—this thriving may be continued through winter, by creating artificially the advantages of summer; for instance,

The green and succulent food of summer is imitated by feeding roots copiously;

The comfort of summer may in some degree be conferred by having good stables and other shelters;

And other things may add materially to these, as the frequent salting of food; the free use of good water; and constant supply of pure fresh water:—

To feed an animal on dry food exclusively, would be like feeding a man on dry Indian meal, which would be rather hard;

To deprive it of shelter, would be like making a man sleep in the snow drift, which would be rather odd;

And to deprive a man of drink and condiment, he would think we rather short allowance. All would have a tendency to thin off his flesh; and what would deuce the flesh of a man, would tend to reduce the flesh of an animal. A want of comfort is a waste of flesh.

Horses that have run to grass all the past season, could not be kept on dry hay and grain; the danger of disease, so common at this season, would be greatly lessened, if they had a liberal supply of roots. They can learn to eat all kinds.

Be very careful not to waste fodder—have good racks and feeding troughs.

Chop up cornstalks finely for cattle; the body of the stalks, usually wasted, is the richest part. If Win. Cobb of Delaware, can make 1,000 lbs of sugar on an acre of cornstalks, after the leaves are stripped off, such rich and sugary fodder should not be thrown away. Salt it and meal it, and they will soon eat it.

Straw, or coarse hay, sprinkled with brine, is readied by cattle, and the salt does them good. Thrash your grain soon, before the rats eat it.

Repair broken tools, and procure new ones, of the very best construction only.

Read the New Genesee Farmer for the past and present year, make a memorandum of every thing worth practicing, arrange these memoranda for every next season, and put them into actual operation each proper season arrives. Pursuing this course, in a few years, any man of decent common sense a first rate practical farmer. Try, if you have a doubt,—and if you have not, try.

Do not forget to send your half-a-dollar for the next volume of the Farmer, and ask your neighbor to do likewise.

Dry Feet.

Observing in the last New Genesee Farmer a prescription for "New Boots," and believing the protec-

tion of the feet from damp and wet, a matter of much importance, as well conducive to health as to comfort, I take the liberty of giving a better composition. It is in fact the same receipt, (which I found a year ago in another agricultural paper,) but so much improved upon that I think it worthy of record.

The tar on (or rather in) the soles, I have used for a great number of years, and have found that it not only made my boots water proof, but nearly proof against wearing out. The receipt is as follows, and is to be used for the "uppers" only.

Nuts-foot oil,	1 pint.
Beeswax,	1 ounce.
Spirits Turpentine,	1 do.
Tar,	1 do.
Burgundy Pitch,	1 do.

To be slowly melted together and well incorporated by stirring, taking care not to set the mass on fire, as the articles are all highly inflammable.

The boots being damp, the composition is to be spread on with a small brush, taking care to cover the seams well, and then allowed to dry. The application to be renewed until the leather is saturated.

The above is for the "upper leathers"—for the soles, car alone is the best application, to be put on while hot, the boots also having been by the fire, so that the soles are quite warm. If there is no grease or other foreign matter on the soles, three or four, and sometimes more, coats will sink into the leather. It must also be used until the soles are completely saturated.

Boots whether "new" or old, (provided they are sound) will, by the above, be rendered entirely water proof, and the leather not only retain its elasticity, but become soft and pliable, and less liable to crack, as well as much more durable.

Nor will there be the objection that there is to boots rendered water proof by linings of gum elastic; for these being also air tight, the feet are kept, when exercised, in a constant state of perspiration, which is very uncomfortable as well as prejudicial to health.

The trouble of preparing boots after the above directions is very trifling, and any one once having tried it, and experienced the comfort of being all day in the snow and slush without having wet feet, will never fail to continue the use of it.

Cazenovia, Nov. 20, 1841.

[We borrow the following dialogue from the New England Farmer, but hope our readers will consider the sentiments our own, and addressed to them individually.]

Lend us a Hand.

Farmer A. Yes, Mr. Editor—I'm not very busy now—I'll give you a lift. What do you want done.

Editor. I want you, now that you have got your fall work well done up, and can spare a little time, to write out an account of your process in reclaiming that meadow of yours, where you now cut 2½ tons of English hay per acre.

Farmer A. I thought you asked for a hand—that I could bave lent; but you seem to be calling for head work, and that's quite another affair; I don't know about that.

Editor. I want the hand at the pen.

Farmer A. At the pen that's where it don't work very well: it's too stiff for pen work—let it go to the shovel, or spade, or hoe, and it feels at home, and will work well, and the head will work with it down in the ditch; but when you come to put the huge paw upon white paper, the head won't work right, and the fingers don't move right. I don't know, Mr. Editor, about my helping you.

Editor. Well, suppose none of you practical men write, how shall I make up such a paper as you want? The facts which common farmers give to one another through the papers, are the most instructive and useful part of our weekly sheet; and if you want tell what you have done, and farmer B. won't tell what he has done—if all the others all the way down the alphabet won't tell—why then the editor can't furnish all that you want—he can't furnish what you want

most. He can theorize and give advice, and extract from other publications; but he can't get hold of the important facts, unless you—yes, you, and others like you, will "lend a hand" and a head too. Come, now, farmer A., give us a few lines, and set a good example.

Farmer A. Fact, Mr. Editor, what you say takes a level of the starch out of my fingers. I never saw the motto right in that light afore. I want to know how neighbor D. and his hundred bushels of corn to the acre; and how Mr. W. raised his 'leven hundred of taters. I'd like to have 'em write all about it; what kind of land it was—how once they plow'd it; dung'd it, and work'd on it. Yes, I'd satnly like to know all about it. But as to my meddling, Mr. Editor, why it's done pretty well, as to that. I do get a good crop of English hay where I did it; it's got nothing to speak on, and that poor stuff. I'd like to know how other folks work it, and if you really think, Mr. Editor, that my writing would set them at it—why then I'll try.

Editor. That's right, sir—that's right. Now, farmers, send in your statements, without further invitation.

Make Home Happy.

It is a duty devolving upon every member of a family to endeavor to make all belonging to it happy.—This may, with a very little pleasant exertion, be done. Let every one contribute something towards improving the grounds belonging to their house. If the house is old and uncomfortable let each exert himself, to render it better and more pleasant. If it is good and pleasant, let each strive still further to adorn it.—Let flowering shrubs and trees be planted, and vines and woodvines be trailed around the windows and doors, and interesting volums to the family library; let articles of furniture to replace those which are fast wearing out; wait upon and anticipate each other's wants and ever have a pleasant smile for all and each.

Make home happy! Parents ought to teach this lesson in the nursery, and by the fire side; give it the weight of their precept and example. If they would our world be a happy and more virtuous country.—Drunkennes, profanity, and other disgusting vices, would die away; they could not live in the influence of a lovely and refined home.

Does any one think, "I am poor and have to work hard to get enough to sustain life and cannot find time to spend in making our old home more attractive." Think again! Is there not some time every day which you spend in idleness, or smoking, or more uselessness, which might be spent about your homes?—"Flowers are God's smiles," and Wilberforce, and they are as beautiful beside the cottage as the palace, and may be enjoyed by the inhabitants of the one as well as the other. There are but few homes in our country which might not be made more beautiful and attractive, not to strangers only, but to their inmates.—Let every one study then, and work, to make whatever place they may be in, so attractive that the hearts of the absent ones may go back to it as the Dove did to the ark of Noah.—*American Farmer.*

It is not essential to the happy home that there should be the luxury of the carpeted floor, the richly cushioned sofa, the soft shade of the astral lamp, these elegancies, gold the appointments but they reach not the heart. It is cleanliness, order, and a cheerful heart which makes home that sweet paradise so often found to be. There is joy, as well, as heartily, by the cottage fireside as in the most splendid saloons of wealth and refinement. What a lovely picture has Burns given us of the return of the cottager to his home, after the labors of the day.

At length his lonely cot appears in view,
Beneath the shelter of an aged tree,
The expectant wife, tottering stagger through,
To meet their dad, with fluttering noise and glee.
He then, beneath stone, his thrifful wife's smile,
The hissing infant prattling on his knee,
Does all his poor carking cares beguile,
And makes him quite forget his labor and his toil.

The luxuries and elegancies of life are not to be despised. They are to be received with gratitude to Him who has provided them for our enjoyment. But their possession does not ensure happiness. The sources of true joys are not so shallow. Some persons, like some reptiles, have the faculty of extracting poison from every thing that is beautiful and sweet; others, like the bee, will gather honey from sources in which we should think no sweet could be found. The cheerful heart, like the kaleidoscope, causes most discordant materials to arrange themselves into harmony and beauty.

Talk little and say much.

On the Different Breeds of Cattle.
To the Editors of the New Genesee Farmer.

GENE.—At the present time there appears to be a great diversity of opinions in regard to the different kinds or breeds of cattle which are best calculated for the farmers of our Northern latitudes. What conclusion can a disinterested person arrive at, if he is governed by the different articles which are penned on this subject? Were we governed by all that contend for the increased value of the different varieties of meat stock, we might arrive at a safe determination upon this point, yet but few of our farmers are able, and if so, willing to go into the rearing of those breeds which stand in higher order than our native stock, as all enterprising men are willing to be governed by the experience of those persons or nations that have excelled in that kind of business which is necessary in a course of farming operations. If we place due credit to all that have written on this subject, and no doubt from a thorough conviction of the truth of their observations in this branch of business, we shall find that all, or nearly so, vary in their observations according as they are interested, consequently we farmers must be governed by those who have two or more of the different kinds, &c.: Devons, Darhams, and Herefords, which seem to stand pre eminent amongst all distinguished breeders, both in England and the United States. Yet, in England, we find a variety of conflicting opinions in regard to the above breeds as in the States, for instance—in Cultivator, Vol. 5th, No. 1, page 17, we find a Mr. Price in England, challenging the Kingdom to produce as fine a stock of cattle as those reared by him, which were pure Herefords. But on reading further we find a Mr. Bates who was ready to meet him in his challenge by producing a stock of pure Darhams; but sickness of the former gentleman was the cause of the failure in the testing between the exceedingly fine qualities of those two stocks, which would have been a great point decided if disinterestedly upon their true merits. Mr. Bates remarks that he thinks the very best Short Horns, which are only a few, are capable of improving all other stocks in the Kingdom, yet he says the common Darhams are inferior to the Devons, Herefords and others, which is candid in him. It seems also, from the statement of Mr. Howard of Gainsville, Ohio, that in the year 1825, there were sent from England, as a present to the Massachusetts Agricultural Society a true Hereford Cow and Bull, from Sir Isaac Coffin, of the Royal Navy, which proved a great acquisition to the stock of that country, and were highly appreciated by the teamsters from their fine horns, stately gait, powerful draught and beautiful mahogany color, &c.

In the same article which will be found in Cul. Vol. 8, No. 1, page 19, he says—"I will here remark that I knew many and owned several of the progeny of the improved Short Horn Bull Admiral (which animal was also sent as a present by the same Mr. Coffin to the Massachusetts Agricultural Society) and I have no hesitation in saying that for the ordinary uses to which cattle are applied in the Northern section of our country I considered the stock of the Hereford Bull allied to decidedly preferable." Next we hear from a very intelligent rearer of stock, Mr. Hopburn in Cul. Vol. 8, No. 2, page 35, in an article which says, "that an argument to prove that the Herefords are an aboriginal race is the largeness of the head and thickness of the neck when compared with the Devon cattle."—Further he states, "were it not for the white face, thick neck, and large head, it would not be easy at all times to distinguish a light Hereford from a heavy Devon," &c. &c. His ideas are quoted from Youatt. I would here remark, that by some the Herefords are considered a distinct

species of cattle, by others a cross of the Devon, with some larger breed. From the best sources of information, I should think that they were most certainly a cross of the Devons with most probably the Darhams. In support of this I would also refer the reader to an article written by Judge Buell, in Cul. Vol. 5, No. 1, page 8, headed "Select Breeds of Cattle." He also, in the same article quotes from a British author in high terms of a cross between the Holderness and Durham for the dairy, and ends in these words: "The Devons were introduced into Berkshire county some dozen years ago, by Col. Dwight, and at the last fair in that county we thought the working cattle surpassed any we had before seen, and we attribute their excellence in a great measure to the Devon blood which we saw strongly developed in some of the finest individuals. We unhesitatingly recommend a cross of the Devons upon our native cattle, as a certain means of improving both their working and fattening properties." In the foregoing extracts which are only a few that might be cited from good authority, what course is it proper to pursue in getting certain and correct information, so that in improving our stock we shall not be disappointed but what we have the best animals for the country and latitude in which we live? I am aware that it is impossible to have a breed of cows which will keep fat and give great quantities of milk.

I would upon the whole, from the conflicting opinions and views of those who are interested in rearing and selling their stock, that farmers who are wishing to improve their stock, (and I doubt not but what all are), that a course of inquiry be instituted from those gentlemen who have Bulls and stock to sell—setting forth by their own statements, and corroborated by the certificates of their neighbors, what has been the course pursued in feeding their improved stock, in comparison with their other stock, and the result accordingly. For instance, if a cow gives 25 quarts of milk per day on the same feed of another cow which gives only 20 quarts, then state the different results of butter made from the milk of each which may easily be done by the Lactometer which is a tube of glass graduated, which readily shows the percentage—as I presume all are aware that it is not the best cow in all cases which gives the most milk, as experiments go to show that in some cases the milk varies in goodness some 50 per cent, according to quality. In short, we want to arrive at the fact which breed of cattle will produce the most net profit from the same feed—requiring each breed to stand the severity of the climate alike. In conclusion I would ask of Mr. Saxford which he considers the best breed of cattle, the Durham or the Devon? as I see in the report of a visit of Rawson Harmon Jr., of Wheeland, in the August number of the New Genesee Farmer that he has both kinds of Bulls on his farm.—Also state which of these two breeds he considers best for the majority of farmers in Genesee county. State fully which will stand our cold winters best, feed us the *one* of the extensive wheat grower in the county.—Also which are the most profitable to raise for the eastern market, considering the keeping, &c. By answering these questions he will confer a favor on

Yours Truly,
Genesee Co., Nov. 11. A. SUBSCRIBER.

On the Importance and Utility of the Dissemination of Knowledge Among Farmers.

MISSES. EDITORS.—I owe an apology to you, if not to your readers, for the delay in further considering the subject proposed in my first article, which perhaps was hardly worth the space it occupied in your paper, and still less the attention of your numerous readers, though honored by an insertion.

I am aware that, in treating upon subjects about which there has been much said and written, there is

great danger of falling into old and beaten tracks, where nothing new can be introduced to attract the attention of the reader. If in the further remarks which I shall submit on the subject already introduced, I may be so fortunate as to present some considerations that will not have a "hackneyed" appearance, I shall consider that neither my time, nor your space, will be unprofitably occupied.

I propose to speak mainly of the importance of the dissemination of knowledge among farmers, as the greatest if not the only means of establishing a proper system of human economy in society, and as the surest method of procuring the greatest amount of social happiness. There would be but little to compensate for the toil and exercise of the mind and body in procuring something beyond a competency of food and maintenance, if the demands of nature did not also require every man to provide for certain social duties and advantages. The elements which compose the best regulated and best organized society, experience teaches us, may be comprehended under the head of virtue and wisdom. This idea may be at variance with the prevailing notions of the day, still it is acknowledged by the candid and reflecting portions of community over whom custom as yet, has not had sufficient influence to make them mistake the true test of character. It is a popular, and may be said to be a prevailing delusion, to judge of the shadow instead of the substance of what in fact constitutes a character for worthy association. The modern notion of refinement, has set up an arbitrary rule, by which external appearance and outward show, accompanied by certain set forms of ceremony and etiquette, are made requisite qualifications for such as wish to mingle in what is called polished society. Thus it frequently happens, that the most worthy, are overlooked and neglected, from the fact, that the fashion of their dress, and their way of thinking which constitutes an exquisite bow,—the are called "backward fellows" because they have not learned to play the hypocrite in those absurd notions with which community has already been too much loaded. The dignity which always graces a man, refined talents, a bright intellect and a well stored mind, all tending especially to qualify for social duties, are now looked upon by the devotees of fashion as secondary considerations, and by too many will pretend to take the lead in giving a direction to public opinion, as of little consequence. And it is to be regretted, that wealth, power and education are not the evil instruments to produce the advancement such a state of things, when, on the contrary, they might be the means, and God who gives, grants them; no other purpose, than as elements ministering in the establishment of sound principles, which insure freedom of action, and the enjoyment of both body and soul.

The occupation of a farmer is looked upon, by the class alluded to, as disqualifying him for the high rank they have assumed for themselves, while the discernment and common sense of the man who tills the soil, forbids that he should desire such associations, envy their station, in preference to the peace and tranquility of his own. Properly considered, there is no situation in life, in which a man may be placed affording him greater advantages, than that of a farmer. This proposition needs only to be reflected upon, and to be made at once convinced that it is true. While in all the other occupations in which men are engaged there be found so much time for reflection, where the mind is left free to form sound views without being contaminated by the evil associations of such as are not permitted to enjoy the blessings so favorable a retirement. It is a common error among farmers, that the business in which they are engaged, shuts them out from the enjoyment of advan-

es so abundantly secured to other men. What are commonly called great advantages are by no means secured alone to any one class of society; indeed, there but little worth seeking for, but what may be obtained by all who are willing to make the effort. The fact that a polished education is an indispensable requisite for the acquirement of knowledge, and that education will only enable one to possess intelligence, is not only erroneous, but a mischievous conception of the mind. For such as would arrogate to themselves the right of monopoly over the abundant truths which are pouring into the mind of every one, the lights of knowledge and intelligence, is not surprising to hear them advance such an idea. Upon the importance of education we cannot however place too high an estimate, for the benefits which it has and ultimately must bestow upon mankind. But it is only when education is used as a means of enlarging the capacity of the mind and preparing an individual to fill the useful station in society, that the greatest good will result from it. And on the contrary, if used as an instrument of producing those sickly plants, too frequently sent forth from our schools of learning to play the fop or the pino, it overloads society with a set of useless beings, that are a burthen upon it. From the knowledge of educated men Agriculture has not failed to receive important aids, but not, when compared to other things of less importance, its due proportion of benefits. When considered a science, as it truly is, it is easy to conceive that the study of it might profitably occupy the most polished mind, and perhaps there is not a science from which educated men, who strive to apply their knowledge to useful purposes, have derived greater pleasure, than from the study of the principles which cause the earth to produce all the wealth of which individuals or even nations can boast. I venture to predict, that no one to whom has applied his talent, education, or experience, the examination of the most simple principles of husbandry, but what has found an ample scope for the profitable employment of either. But while such as are engaged in what are termed "professional pursuits," are obliged to become acquainted with the ancient languages, in order to be familiar with certain obscure terms and phrases, the former has no occasion to recollect any but the most simple terms to gain all the knowledge his most ardent desires may demand. The school of practice he has daily opportunity for gaining knowledge, while at the same time, experience and practical observation, will enable him to demonstrate every principle connected with the business of his life. Comparatively but few engaged in it, consider how important is the calling of a farmer, and many have settled down under the conviction that chance or necessity has compelled them to a station, if an opportunity had offered, their choice could not have dictated. From this, perhaps, more than any other cause, the but too prevalent idea has originated, that this class of our fellow citizens are set on as only worthy of the associations of the "second class." What error has failed to do in filling the minds of many with false notions, prejudice has failed to accomplish the whole work: and therefore it is, that a more general dissemination of knowledge may be considered necessary.

In my next it will be my purpose not to deal so much as heretofore in general remarks, but shall endeavor to confine myself to a more particular application of the subject. Yours, &c.,
C. P. T.
Batavia, Oct. 20th, 1831.

For the New Genesee Farmer

Annual Exhibition

of the Massachusetts Horticultural Society—Horticulture in Monroe County, &c. &c.

It will doubtless be gratifying to the friends of Horticulture throughout the country, to hear something of

the late Annual Exhibition of the Massachusetts Horticultural Society, held on 23d 24th and 25th of Sept.

From the report published in the October number of the Magazine of Horticulture, it appears that the variety of Fruits was greater than any ever before exhibited in the United States. Mr. Manning, of Salem, the greatest promologist in America, sent one hundred and thirty kinds of Pears; Mr. Wilder, the President of the Society, fifty; Mr. Cushing, forty, and many other gentlemen, thirty, twenty and ten each. A magnificent pyramid of Grapes, comprising twelve varieties on a line of Pines, Nectarines and Plums was presented by Mr. Haggatson Gaudinier to J. P. Cushing, Esq. The exhibition of vegetables was also unusually good. The Dublin show far surpassed any previous exhibition of this splendid flower by the Society, and the number of Pot plants, Cut flowers, Boquets, &c., was very great.

At the close of the exhibition the members celebrated the 13th anniversary by a dinner, after which several excellent addresses were delivered and appropriate toasts and sentiments were given,—of the latter we have selected the following, as our limited space will not admit of publishing all:—

Agriculture and Horticulture—The first nation's greatest wealth, the next its greatest luxury.

The Cultivation of the Field—It was the first act of civilization, and is the basis of all other branches of industry and is the chief source of the prosperity and the wealth of nations.

The Primæval Employment of Man—To dress the garden and keep it.

Horticultural Societies—"Fiscal corporations" whose capital stock is a well cultivated Bank of Soil, whose Directors are producers, whose depositors get cent per cent for their investments, whose exchanges are never below par, and which "operate *per se* over the Union."

The Massachusetts Horticultural Society—Its birth has opened a new era in the horticulture of New England.

The Rose—While we acknowledge her as Queen at the court of Flora, we are happy to recognize among our guests the distinguished representative* of that Queen, whose Kingdom have adopted in the Rose their Floral emblem.

Horticulture—The art which strews our paths with Roses—lands our tables with luxuries, and crowns our labors with the rich fruits of contentment and happiness.

Women—A seedling sprung from Adam's side,

A most essential share,

Because of Paradise the pride,

And bore a world of fruit."

We cannot but do justice in this brief notice to the report, which occupies nine pages of the Magazine, and much remains yet to be published. This Society is one of the most useful and flourishing of the kind, in the country. But 13 years ago since it was organized; their meetings were at first held in a small room; and by steady and persevering efforts worthy of all praise, they have gradually advanced so that now they occupy a spacious hall in Tremont Row, Boston. It would be impossible to estimate the advantage which have resulted from their labors, not only to New England, but to the country at large. Mr. Walker, a prominent member of the Society, in speaking of this, remarked, "who can recount its acts and the benefits thereof to the community and after generations? Had I the eloquence of a Cicero, it might be exhausted on this subject."

We would strongly recommend this subject to the attention of Cultivators in our own favored district. In view of such results the friends of Horticulture should want no other inducement to associate themselves together for the purpose of promoting Horticultural improvements. Every instance where proper attention is bestowed to this branch of industry, proves most satisfactorily that we possess the means, if we only avail ourselves of them, to excel both in quantity and quality of our Horticultural productions. At the

* Mr. Gatten, the British Consul at my eldest.

and Agricultural Fair for this county the exhibition of garden productions was exceedingly limited, only about half a dozen exhibitions of fruit—two or three of flowers, and five or six of the more common sorts of vegetables. This, for the Horticultural department of the Fair for the whole county of Monroe, will be admitted by all to be far from what it ought to be, and argues forcibly the necessity of making some advancement that will excite more general interest on a subject of such vast importance to the public. P.

From the Illinois Cultivator.

The Short Horns as Milkers.

Mrs. GAYTON & TRICKER.—In the June No. of the Cultivator there appeared an article, signed Lewis F. Allen, in which the opinion was advanced, that the improved Short Horns were the stock best adapted for New England dairies.

The ability with which this article is written, and the source from which it comes, ensures it great weight with your readers. But as this opinion is contrary to that of most agriculturists in this neighborhood, (the vicinity of Boston) I have been in hopes of seeing an answer to it in your paper by some one more familiar with this subject than myself.

That this stock is the best suited to the rich pastures and fertile lands of New York and the Western states appears to be generally admitted. Are they equally well suited to the thin soils and scanty pastures of New-England?

In the act of saying too much for his favorites, Mr. A. has given them less praise in some respects than we should readily concede to them. He compares them with our average native cows; we are in the habit of comparing them with our good dairy cows. The quantity of milk given by the Short Horns as compared with our average native cows is greater than Mr. Allen asserts. The quality of the milk is considered by us generally as inferior to that of the common cows of the country. Much of it would not, I think, sell readily for milk. This is contrary to Mr. A's experience with his Short Horns; and there are certainly among the grade cows many exceptions to a here.

Writers are too apt to forget that the most important question, and what we really want to know is, what stock or stocks will give us the best and cheapest milk, butter, cheese, and beef; and it costs stock will give us the most per centum. If it costs three times as much to raise and to keep an improved Short Horn in our climate and on our soil as one of the native breed, although it gives twice the butter and cheese and twice the beef, it may be a poor stock for us.

No one here I think would be inclined to accept the wage offered by Mr. Allen at the end of his communication; for we do not content that ten or twenty cows, which should be a fair average of the native breed of New-England, would give as much milk, butter and cheese as ten or twenty cows of a breed of nearly twice their size when both lots had as much nutritive food as they could eat. That our cows seldom have all the ear food.

Mr. A. refers to British publications to prove the superiority of the Short Horns. Following his example, I will quote the British Husbandry and Low, as the best British authorities I know of on the subject. In British Husbandry, ch. 38, on milk cows, it is said, "the breed most esteemed in the London cow keepers who sell the milk without making butter or cheese, is of the old Yorkshire stock, or a cross between the Two-water and Holderness, as producing the greatest quantity; for they are in that case reared in the house, and of course provided with an abundance of cut grass brews' gramin, and succulent roots; but when grazed, they require very good pasture, and are not generally considered to produce milk of a rich quality. But the breed which of all others appears to be gaining ground throughout the United Kingdom for abundant produce upon ordinary pasture is the Ayrshire kyle."

David Low in his Elements of Practical Agriculture says, "By long attention to the elements that induce a disposition to yield milk, the breed of Ayrshire has become greatly more esteemed for the dairy than other animals much superior to them in size and feeding qualities."

I hope to see this subject more thoroughly discussed in your journal by Mr. Allen and others, who, like him, speak honestly what they sincerely believe.

A YOUNG FARMER.

Vicinity of Boston, Sept. 23, 1831.



ROCHESTER, DECEMBER, 1841.

Farewell—Till Next Year.

We feel somewhat reluctant to throw aside our present subscription book, containing as it does the names of nearly twenty thousand of our esteemed friends! But it can't be helped—and we hope to have the pleasure of recording them all again in a short time, with many more besides. We have got a larger and handsomer book for the next year, and all who wish the honor of having their names recorded in it, will send us FIFTY CENTS!

Uncurrent Money.

Bills of solvent banks in Ohio, Indiana, Kentucky, Pennsylvania, Canada, &c., will be received at par in payment for this paper, if sent free of postage and no commission deducted. Michigan and Illinois bills cannot be received at present. Bills of the Buffalo (Safety Fund) banks will be received from subscribers in Michigan and Illinois. (Till further notice.)

Travelling Agents.

We do not find it necessary to employ travelling Agents for this paper; but C. P. COLMAN, will act as such when travelling on his general business in the country. He will carry out Garden Seeds of his own raising and Corn Drosses and Brushes of his own manufacture.

The Editors.

Mr. Colman is expected at Rochester by the latter part of December—in time to superintend the next No. of the paper. The present editors will continue their assistance, and the character of the work will not be materially changed.

It may be well to remind some of our readers that the articles which are found in this volume, marked thus, * are written by David Thomas, of Aurora, Cayuga Co., and those marked thus, * are by his son John J. Thomas, of Macedon, Wayne Co.

Henry Colman.

Much has been said in praise of HENRY COLMAN, by agricultural papers of late, but as many of our readers probably do not see other papers of the kind, we deem it proper to give an extract or two by way of introducing him to their acquaintance. As we do this without his knowledge or consent, no one can accuse him of egotism on account of it.

The first is from the Farmers Monthly Visitor, edited by Ex-Governor Hill, of New Hampshire.

"The Massachusetts Agricultural Commissioner.—There is no man in America more ardent in the cause of Agricultural improvement than HENRY COLMAN, who is under the employment of the Legislature of Massachusetts, and who visits different points in that Commonwealth with the view to inspect the farmers and to present the results of his observations and labors to the public. For effecting his object, Mr. Colman travels in various directions among the yeomanry of the Commonwealth, with his horse and dog wagon and in almost as plain an attire as the workmen in his field. We have a few times seen Mr. Colman among the farmers at agricultural exhibitions and elsewhere; and the enthusiasm he exhibits on each agricultural topic cannot fail to infuse itself into the most insensible farmer and arouse all his energies. The conversational powers of Mr. Colman are equal to those of the best man we ever met; his language flows like a stream of pure water; and like many gushing rivulets that ooze from the hills and fertilize the land below, so do his writings throw translucent light upon the subject he describes.

The Commissioner will find but few equals in the art of describing the pleasures and the advantages of

a rural life, and of recasting that occupation on which all other occupations depend, from the neglect in which indolence or lack of enterprise attempts to obscure it."

The next is from the (Baltimore) American Farmer, the oldest agricultural paper in the Union, edited by John S. Skinner, a veteran writer in the cause.

"HENRY COLMAN.—We draw three lines under his name, as we believe it is the printer's sign for large capitals and because we would, in every way, do honor to an eminently useful man; and we know of no one whose labors of utility are more wide-spread, or likely to be more enduring than 'THE COMMISSIONER FOR THE AGRICULTURAL SURVEY OF MASSACHUSETTS.' There is originality, vigor of thought, and practical usefulness in his observations on the agricultural practices; and products, and capacities of his State, and his suggestions for the further development of its resources, that must strike every one, no whatever distance, who, by any chance, sees what he is doing."

The following is from the (Rochester) American Cultivator, edited by Gen. Wm. L. CHAPMAN, who is personally acquainted with Mr. COLMAN:

"I am happy to announce to the farmers of Western New York, that Mr. COLMAN has recently been able to secure the services of HENRY COLMAN, of Massachusetts, as a permanent Editor of the New Genesee Farmer. Mr. Colman was for many years an eloquent and popular preacher. He is a well-trained scholar, richly furnished with information in the various departments of literature and science—a man of warm and generous impulses, and an accomplished gentleman. His pen is sprightly, nervous and instructive. Some years since, he became a practical farmer in one of the most delightful spots in the beautiful valley of the winding Connecticut in the upper part of Massachusetts. From that time he has cultivated agriculture as a profession, with the loving enthusiasm of the most devoted artist. For a few years past he has been the Agricultural Commissioner of Massachusetts by the appointment of the Governor under an act of the Legislature; along with his keenness of observation, and his untiring zeal in the cause, he has enjoyed the amplest opportunities for acquiring and digesting a vast store of every-day available knowledge. It is hazardous nothing in saying, that it would be difficult, if not impossible, to find a man in the country whose qualifications are more largely adapted to give life and interest to an agricultural journal, than HENRY COLMAN."

He comes to Western New York, with the purpose of making it a man's residence. In comparison with New England, he will find a new country, whose resources as yet are but very partially developed, and but imperfectly comprehended by the people. He cannot fail to be delighted in anticipation of what industry and ingenious husbandry will one day make this garden of the State. It by his written essays and oral addresses he can succeed in imparting to a few leading minds, but a tide of his own enthusiasm in the pursuits of agriculture, a few years will produce a revolution in that department which will astonish us.

THE NEW GENESEE FARMER,
AND GARDENER'S JOURNAL.

VOLUME THREE—FOR 1842

THE Cheapest Agricultural Paper in the Union.—6 Large Pages Monthly, with engravings, only 50 Cents per year!!

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(Late Agricultural Commissioner of the State of Massachusetts, and Editor of the New Eng. Farmer.)

Grateful for the extensive patronage which the New Genesee Farmer has received in the last year, the proprietor now has the satisfaction of announcing that he has made such arrangements for the coming year as will tend to be highly gratifying to the readers of the paper, and secure for it a still more extensive circulation.

Desiring to make it the most useful and lively circulating agricultural paper in the Union, the proprietor has engaged the services of the able and practical agricultural writer and editor, HENRY COLMAN, well known as the late Agricultural Commissioner of the State of Massachusetts, and formerly editor of the New-England Farmer. Depending on the cooperation and support of the friends of agriculture in the Empire State and the Great West, Mr. Colman has consented to leave the field where he has labored long with so much honor and success, and taken up his abode at Rochester, where, through the medium of the Genesee Farmer, he expects to find a more extensive field of usefulness.

The former editors and contributors will continue their assistance, and care will be taken to make the paper interesting and useful, not only to farmers, but to all persons engaged in rural or domestic affairs. With such a combination of talent, the New Genesee Farmer cannot fail to obtain an immense circulation, thus giving new impulse to the cause of

agriculture—promote the best interests of community, and tend to increase the wealth and prosperity of the Nation. It is hoped, therefore, that every friend of agriculture—every well-wisher of his neighborhood and his country, will lend his aid, and not only subscribe himself, but induce his neighbors to subscribe also. The paper will be continued at its present low price, in order that its influence may be much widely extended. Its appearance will be considerably increased, and having now a Power Press exclusively for its work, greater promptness and regularity will be secured. Careful clerks are engaged to mail the papers, so that it is believed there will be little cause for complaint hereafter.

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ROCHESTER PRICES CURRENT.

CORRECTED FOR

THE NEW GENESEE FARMER, DECEMBER 1, 1841

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CORN,	"	50	5
OATS,	"	25	5
BARLEY,	"	45	5
RYE,	"	62	5
BEANS, White,	"	62	5
POTATOES,	"	20	5
APPLES, Dutch,	"	25	5
FLOUR, Superfine, per bbl.	5.25	5	5
" Fine,	5.00		
SALT,	"	1.35	
PORK, Mess,	"	10.00	10.5
" Prime,	"	9.00	9.5
" per 100 lbs.	"	2.50	2.7
BEEF,	per 100 lbs.	3.00	3.5
POULTRY,	per b.	7	
EGGS,	per dozen	18	
BUTTER, Fresh,	per pound	15	1
" Firkin,	"	10	1
CHEESE,	"	5	
LARD,	"	8	
TALLOW, Clear,	"	8	
HIDES,	"	5	
SHEEP SKINS,	"	50	6
PEARL ASHES,	per 100 lbs.	5.25	5
POT,	"	5.50	
WOOL,	per pound,	30	4
HAY,	per ton,	13.00	14.0
GRASS SEED,	per bushel,	1.25	1.5
COVER,	"	7.00	8.0
FLAX,	"	87	1.00
PLASTER, (in tubs) per ton,	6.00		
" bulk (at Wheeland),	3.50		

Remarks.—Navigation is closed—the mills have stopped, and the roads are bad; of course very little business is doing in market, and the prices of produce very unsettled. The principal article now offered to farmers' although we perceive it is a slight comparison with other places, as can be afforded. The latest quotations from Cincinnati are 2.25 per 100 lb



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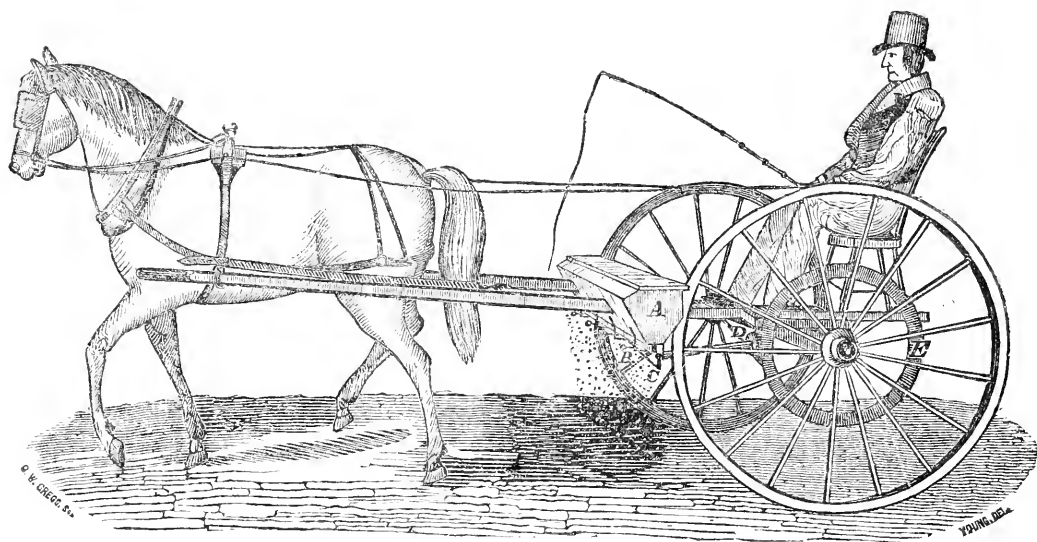
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Publishers Notice.

"We wish a happy New Year" to our numerous friends who have so promptly sent in their new subscriptions. Those who have not done so will not receive this number till that duty is attended to, and we insert this *Hibernian Notice* to inform them thereof!

Canada and Pennsylvania money, is at a discount of 7 to 10 per cent. here, and some of our agents complain because we refuse to allow them a commission on it. We now say that we will allow them one half of the usual rate of commission on such money, if sent free of postage.

Agents and officers of Agricultural Societies in Canada, are requested to remit payments to Messrs. Lamm, Farr, & Co., Toronto. Those who do so will be allowed the same rate for Canada money as last year.

A New-Year's Gift.

We print a few hundred extra copies of this number, and send them (with show bill) to Post Masters and others as a New-Year's Gift in return for the numerous favors they have granted us. We hope they will *please read and Circulate.*

Editorial Notice.

The necessity of Mr. Colman's attending to complete the publication of his Fourth Report on the Agriculture of Massachusetts, and a multiplicity of cares and labors incident to a removal from one home to another distant home, prevent his doing but very little for this number of the N. G. Farmer. He will endeavor to atone for present deficiencies hereafter. It is his expectation to take up his abode in Rochester about the 20th of January ensuing, if a kind Providence permits; and there at that time he requests his friends to address him.

EDITORIAL ADDRESS.

Few men who have had much experience of life venture upon any new enterprise without an oppressive and embarrassing feeling of the uncertainty of success. The young may be confident; the old know how many reasons there are for being wary and distrustful—of themselves as well as others. It is not always easy to satisfy one's self; it is often difficult to satisfy others; and what is best to be done and how it is best to do it, the most sanguine are often at a loss to determine. But it will not on that account do for us to hesitate to act; or to stand like the traveller on the rivers bank, who determined not to cross until the waters had all flown by. We must act; and in attempting to do the best we can, we may at least satisfy our own conscience, if we satisfy no one else.

I have now this struggle to go through with in undertaking the editorial department of the New Genesee Farmer; and I do not know how otherwise to determine it than as above. I promise my best services. I will do what I can to render this paper instructive and useful, agreeable and entertaining; serviceable to agricul-

tural improvement; conducive to the diffusion of wholesome knowledge; and the promotion of sound morals.

I enter upon the undertaking with an unfeigned diffidence, but at the same time with great pleasure. My mind has been many years occupied with agricultural inquiries and my heart has been long and deeply interested in the improvement of the farming art and the farmers themselves. My habits through life have called me to mingle with them constantly. There is no rural or agricultural labor with which I have not been familiar. My enthusiasm in the cause of agricultural improvement has never in the slightest measure flagged or abated. I know no more reasonable or useful object to which I can devote the power of doing any thing for my fellow man which Heaven has given me. With these sentiments I enter upon a new field of enterprise and labor; and I shall be happy to do what I can to enrich and adorn it, and to render it more and more productive.

I have often thought, indeed I think every day of my life, what a curious process this writing and printing is; and I never receive a letter but I look upon it as a kind of standing miracle. When Capt. Smith was threatened with death by the Indians in Virginia, he was released by the interposition of Pocahontas upon a condition that he would give a certain amount of arms or ammunition for his ransom. To obtain these he must communicate with his friends. In order to do this he wrote a few lines upon a leaf torn from his pocket book and having sent this by a messenger to his friends, the ransom was immediately paid. The Indians looked at this proceeding with unutterable astonishment. What indeed can be more astonishing than that by a few scratches, a few black marks, a few mystic characters, we can communicate with each other as effectually as if we grasped each others hands or looked in each others eyes; that we can tell our thoughts, feelings, purposes, history, with certainty and precision, though those with whom we communicate may be hundreds and thousands of miles removed from us, though mountains may raise their inaccessible summits, and oceans spread their unfathomable depths between us; that we can live indeed after we are dead; achieve as it were an immortality on earth; and transmit that which shall materially affect men's condition, their subsistence, conduct, virtue and happiness, far on the line of time, with generations yet unborn, who never knew us nor ever heard our names.

But it is not merely the wonder workings of this wonderful invention that impress us; but there is connected with it a moral responsibility that is most serious. Whoever wields a pen wields a powerful instrument for evil or for good, indeed in many cases far more powerful than the sword of the victorious hero, leading on his thousands to conquest. The martial victory may be soon forgotten; the blood-stained field be cleansed; and the field covered with the dead and dying become again verdant and waving with the beautiful products of the husbandman. But what is written is written, and cannot be taken back. It must remain to work its effects as much in the end as the beginning; and how long and to what extent no human

sagacity can predict or even imagine. It is said to the singular praise of one that he never wrote a line, which "dying he would wish to blot." This is a most covetable eulogy, and happy, thrice happy shall I be if I can but approach so happy an honor.

The New Genesee Farmer has two objects; to improve the soil and to improve the man. To illustrate the best modes of culture by precept, by example, and by experiment; to treat of plants and products, soils and manures; of the influences of light and heat and rain and dew and frost; of farm stock, farm buildings and implements, and every thing connected with husbandry and domestic economy. This will be its first object. The second will be to treat of all such useful knowledge and inventions in the mechanical departments as will be particularly interesting to farmers, the tillers of the earth, and persons dwelling in the country and interested in rural pursuits. The third will be to treat of markets and trade and commerce, and all facts and laws bearing upon these subjects as far as they concern that particular class in the community to whom the paper is mainly addressed. The fourth object is the moral improvement of the young and of the rural population generally; and if possible to render the profession of agriculture attractive and respectable. As we claim for it to be the most important of all pursuits, vitally affecting every condition in society, so we wish to see it not exalted above any other respectable profession in the community, but not degraded and disdained as it has too often been; and taking its proper rank with the first and best.

These are the general objects and views by which I shall govern myself in the conduct of this paper. I shall not now enter into details. The New Genesee Farmer has not now character to establish. By the ability and intelligence with which it has been conducted it has already obtained a wide circulation and has been held in high esteem. I am happy to say that I am not to be deserted by those, who have hitherto served in its ranks. I shall do what I can therefore to maintain its character and to extend its usefulness. Besides the co-operation of those, who have hitherto contributed to its columns, I am promised other and most valuable aid, from some of the best minds in the country; and from such co-operation in a cause so important we may anticipate the best results. I have many more things to say in relation to these matters; but I will not extend my editorial at this time; and these matters will come in various forms and on other occasions.

It has always been common in the clerical profession to preach on the Sunday after their ordination on the duties of a minister. A very shrewd friend and one of the best of men said to me that he took care after his settlement not to do this, lest he should come short of his promises, (as who in an untired case does not) his people might not forget to remind him of what he promised. Perhaps it would have been wise in me on taking my seat in this editorial chair to have said nothing; but having said what I have, I shall after this avowal have, in a due regard for my word, very strong motives to act upon the principles, which I have laid down.

HENRY COLMAN.

IMPROVED STOCK.

Ayrshire, Durham and Native.

Lewie F. Allen, Esq., of Buffalo, in an elaborate article in the Albany Cultivator of May or June last, which I have not at hand, was pleased to attach some remarks which I had made on the subject of Dairy Stock at one of the Agricultural Meetings held in Boston the last winter. Many of my friends said on reading the piece, "You will answer Mr. Allen, certainly?" But said no I am not about to take off my coat and turn up my sleeves and go to fistfights with an old friend. I grant that the letter appeared very civil, and had several gentle passages in it; but these fine touches reminded me of the remark of a Frenchman in relation to another person in a case somewhat similar. "Ah! bien; he von ver civil man; he make von, two, tree bow; he say, perlez vous, monsieur, and (crossing his fingers over the back of his neck) then he cut you off behind." I saw the drift of the letter. My friend Allen's coffee was not sweetened that morning, and he determined to challenge me to single combat. He began by putting me in the opposition. But I am not opposed to him in this matter; I never have been; I am not the enemy or undervaluer of the Improved Durham Short Horns, but I say only that we want the proof that they are the best milking or Dairy Stock among us; and that they are the stock best adapted to the New England pastures and the habits of our New England farmers. Mr. Allen's statement that Mr. Powell had a Short Horn Cow which had made 22 lbs. of butter per week is, I apprehend, a mistake, as no such case has been given to the public by Mr. Powell within my knowledge, and he probably refers to the cow Belina, of which I have given an account in the subjoined notes. Now I have only to add that I am a peaceable man, and do not accept my friend Allen's challenge; but I have gone to work quietly to collect all the facts on the subject, which I could find; and laying them honestly before the farmers, they, as good men and true, will I have no doubt render an honest verdict. Now gentlemen I stand together and barken to your evidence.

H. C.

(From Mr. Colman's Fourth Report on the Agriculture of Massachusetts, now in press.)

Dairy Stock.

Middlesex county, though very poorly suited to grazing, and on account of the high prices of all cattle feed, not at all adapted to the raising of stock, has yet several individuals of intelligence and public spirit engaged in this patriotic object.

Some years since, (about 1830,) a number of gentlemen associated for the purpose of establishing a stock farm, and purchased in Charlestown a valuable property for this object. "It was proposed to establish a stock farm in the vicinity of Boston, devoted to the important objects of breeding and rearing the best breed of horses, neat cattle, sheep and swine; the rearing and selling on commission all kinds of live stock; and combining also with these the business of agriculture and horticulture, upon the most approved and economical system. This farm consisted of 222 acres, was made up of a variety of soils, and was well adapted to the purposes either of summer or winter feeding of animals, yielding a great quantity both of English and salt hay." Samuel Jacques, a man well experienced and of excellent judgment in these matters, took the farm with this view; and has succeeded, by judicious selection and crossing, in rearing a milking stock of extraordinary valuable properties for the dairy. Of this stock I gave a full account in my Second Report, and, as far as appears, there is no reason to withdraw the commendation there bestowed on them. Their cheese properties have not been tested; nor have I been able to ascertain the quantity of milk afforded by them in any given time; but the quality of their milk for butter is not surpassed by any animals which have come under my observation. There can be no doubt that cheese from their milk would correspond to its superior quality. Mr. Jacques informs me that they still maintain their excellent character in this respect. My only regret is that I have not been able to induce him to make such continued experiments of their yield in milk or butter, for a week,

or month, or three months, as would warrant me in speaking with more confidence. Without my personal reference whatever, I may be allowed to say that in my opinion, intelligent farmers, who have valuable animals, owe it to the agricultural community to make such trials as will fully test their distinguishing properties. All conjecture and guess work in this case ought to be utterly rejected. The trial of a day or week is a small matter, and will seldom warrant any confident conclusions. In the case of a valuable cow or race of cows, the age and condition of the cow should be noted, her local and pedigree, her feed and treatment, with the utmost particularity; the times of milking, and the amount yielded for one, or two, or three months, in pounds and in cubic measure; the actual amount of butter or cheese produced in the time, and the quantity of milk and of cream required to make a pound of butter or of cheese. There may be some trouble in making these observations and experiments, but the satisfaction of this exact knowledge is an ample compensation for any trouble which it might cost. I am compelled to say, that in respect to most of the statements which men make in regard to their stock, unless they are founded upon such exact measurements and observations continued for a length of time, no reliance can be placed upon them.

Another breed of cows has been introduced into the country, from which great improvements in the dairy have been anticipated. These are the Ayrshire, the most celebrated dairy stock of Scotland. The Massachusetts Agricultural Society, with that eminent liberality and single desire to advance the agricultural interests of the community which have always marked all the proceedings of their board, imported an Ayrshire bull and three cows. The gentleman empowered to select them was well qualified for that object, and took particular pains to carry the patriotic designs of the society into effect.

The bull has been placed successfully in different counties of the State, and the cows distributed with different individuals, viz. C. B. Baker, of Medford; Elias Plimney, of Lexington; and Daniel Webster of Marshfield.

John P. Cushing, of Watertown, whose public spirit and regard for the agricultural interests of the country have been displayed in the management of his farm, in the importation of some of the best animals from abroad, and the gratuitous distribution of their progeny among the farmers with a view to improve their stock, has likewise imported some of the finest animals, which skill and money could select, of the Ayrshire stock.

It does not lie in my way to go into a history of this stock in this place. They are generally agreed to be the best dairy stock in England. They are reputed to yield large quantities of milk, and produce large amounts of cheese and butter; besides keeping themselves in good condition and being easily made ready for the butcher. The cows are eminently beautiful. In size, however, and symmetry, they are decidedly inferior to the improved Durham short horns; but there is good reason to think them a harder race of animals.

From some of the gentlemen to whose care the society's animals were committed, I have been unable to obtain as full information as is desirable. Mr. Webster's forman, in his absence, informed me that the cow was quite superior as a milk cow. Mr. Brooks says, "My cows give about the same quantity each, but I cannot boast of their doing like mine which I have heard of. My Ayrshire does not, I think, give more than thirteen or fourteen quarts at best, and the milk is rather than others with the same feed. It is, however, a valuable race in our State, as doing well in our common pastures, and not running to fat like some. They are very gentle."

Mr. Plimney, in a recent letter, thus writes:—"I have given the Ayrshire stock a pretty fair trial, considering my limited means,—enough however to satisfy me of their valuable dairy properties, and of the capacity for enduring the cold winters and short keep of the northerly part of the country. In the month of June, 1830, I selected from twenty cows my best native cow, for the purpose of making a trial with my Ayrshire cow as to the quantity of butter each would make. My old pasture, for I had then done little to improve them, afforded but a very short time of grass. These two cows ran with my other stock, and had no other food than what they could get in these dry pastures."

The quantity of milk from the Ayrshire was not greater than that from my native cow; but the Ayrshire made nine and three-quarter pounds of butter in a week, while the native cow in the same time made but eight and a half pounds; besides, the quality of the butter from the Ayrshire cow was decidedly better

than that from my other cow. The trial was made with great care, and the correctness of the result may be relied on. The Ayrshire cow has been kept with my other stock and inclined to do better than the rest; still she appears to better than any of my other cows, and endures the cold of winter quite as well. She has given me three fine calves; the first a bull, which I now have, a very fine animal; the second I sent into the county of Essex, and is owned by Mr. Malsland of Andover, and at the cattle show in that county in 1830, the first premium, offered by the State Society on bulls was awarded to him. The third is a heifer, now little more than a year old, and is a beautiful creature. Upon the whole, from the little experience I have had, I cannot doubt that the Ayrshire, for its dairy properties, is greatly superior to the Durham for this part of our country."

Mr. Cushing has been kind enough to favor me with an exact account of the produce of four Ayrshire cows on his farm for the times therein specified, which I here subjoin:

1. Memoranda of Milk given by imported Ayrshire cow Flora, for one year, 1837.		
From 17th of May to 1st of June,		608 lbs.
" 1st of June to 1st of July,		1192 "
" 1st of July to 1st of August,		1064 "
" 1st of August to 1st of September,		811 "
" 1st of September to 1st of October,		718 "
" 1st of October to 1st of November,		489 "
" 1st of November to 1st of December,		469 "
" 1st of December to 1st of January,		432 "
" 1st of January to 1st of February,		412 "
" 1st of February to 1st of March,		383 "
" 1st of March to 1st of April,		484 "
" 1st of April to 1st of May,		419 "
" 1st to the 29th of May,		242 "
		7728 lbs.

At 10 lbs. per gallon, 772 gallons.

2. Memoranda of Milk given by imported Ayrshire cow Juno, for one year, 1837.		
From May 23d to June 1st,		843 lbs.
" June 1st to July 1st,		796 "
" July 1st to August 1st,		845 "
" August 1st to September 1st,		690 "
" September 1st to October 1st,		475 "
" October 1st to November 1st,		513 "
" November 1st to December 1st,		318 "
" December 1st to January 1st,		394 "
" January 1st to February 1st,		401 "
" February 1st to March 1st,		326 "
" March 1st to April 1st,		338 "
" April 1st to May 1st,		216 "
" May 1st to 7th,		30 "
		5367 lbs.

At 10 lbs. per gallon, 536 gallons.

3. Memoranda of Milk given by imported Ayrshire cow Emma, from June 20th to May 21st.		
From 20th June to 1st July,		283 lbs.
" 1st July to 1st August,		805 "
" 1st August to 1st September,		623 "
" 1st September to 1st October,		567 "
" 1st October to 1st November,		498 "
" 1st November to 1st December,		319 "
" 1st December to 1st January,		403 "
" 1st January to 1st February,		406 "
" 1st February to 1st March,		351 "
" 1st March to 1st April,		319 "
" 1st April to 1st May,		319 "
" 1st May to 21st,		151 "
		5163 lbs.

At 10 lbs. per gallon, 516 gallons.

4. Memoranda of Milk given by imported Ayrshire cow Cord, from Nov. 17th to May 21st.		
From November 17th to December 1st,		388 lbs.
" December 1st to January 1st,		834 "
" January 1st to February 1st,		846 "
" February 1st to March 1st,		776 "
" March 1st to April 1st,		704 "
" April 1st to May 1st,		670 "
" May 1st to 21st,		405 "
		4623 lbs.

At 10 lbs. per gallon, 462 gallons.

The mode in which these cows are fed is as follows: "Our Ayrshire cows, during the winter, have half a bushel of sugar beets or potatoes; with the former, about a pint of dry meal mixed with the cut beets; but when they have potatoes, the meal is omitted.—With the above, they have as much English hay as they can eat. In the summer they have nothing but what they get in the pasture. They are driven, more

ning and night, from the pasture to the barn to be milked, and after that operation are driven again to the pasture.*

In addition to these statements, I am favored with an account of the produce of an Ayrshire cow imported and owned by George Randall, of New Bedford. His letter to me is as follows, dated Sept. 9, 1841:

"My thorough-bred full-blooded Ayrshire cow Swinley, was imported by me from Scotland in 1839. She was six years old in May last. She calved on the 31st of last March. She was milked regularly three days previous to dropping her calf; and had drawn from her in the time from 45 to 50 quarts. Commenced setting her milk for butter on the 1st day of April. The milk was not allowed to touch a tent, was fed on new milk for nine days, and after that time on skimmed milk. In all April, the quantity made from her was 43 lbs. 6 oz. The quantity in May was 42 lbs. 1 oz. In this month her milk decreased. Quantity in June was 44 lbs. 7 oz. In July and August, her milk was not kept separate from that of other cows. Weighed her milk [for one day, H. C.] on the 7th of April; it weighed 43 lbs. 9 oz. On the 2d of September commenced weighing her milk; in four days it has averaged 25 lbs. 8 oz. and has made in four days just five lbs. of butter. My pasture through the season has been very poor and short, owing to the dry weather and having too much stock for the quantity of pasture. From the time this cow was turned to grass until this day, (30th Sept.) she has had by measure two quarts of Indian meal per day regularly."

The Ayrshire bull belonging to the Society has been kept in Berkshire, Hampshire, and Worcester counties; and a fair opportunity will soon be had of testing the qualities of his stock. One of the best farmers in Berkshire county, speaks to me of their promising extremely well. In my opinion, the only certain test of the dairy properties of a cow is in the milk pail and the churn.

Of the Improved Durham Short Horn race, we have undoubtedly had some of the best animals ever bro't into the country, both with high aristocratic pedigree, and without pedigree, of uncertain and plebeian origin. In some parts of the country, large expenditures have been incurred in the importation of this stock; and Admiral Coffin, of the British Navy, in grateful remembrance of the land of his nativity, presented to the Massachusetts Society several fine animals of undoubted pedigree of the improved Durham short horn race, which were some time kept for the improvement of the breed. In addition to these, we have had a valuable bull imported by a merchant of Boston, understood to be the sire of Mr. Jaques's cream-pot breed; and the superior bull "Bolivar," imported by John Hare Powell, of Pennsylvania, from J. Whitaker's stock in England, celebrated for its extraordinary dairy properties. This bull was the finest animal of the kind which I have ever seen. A full-blooded short horn bull (Denton) was likewise imported into Worcester county, whose progeny has been highly esteemed. Several other animals of the same breed have been imported and kept in the State; and their blood has been considerably diffused throughout the country.

In point of size according to their age, in respect to growth and proportion of form, these animals are in my opinion not surpassed, indeed, not equalled, by any which have come under my observation. The Herefords are extremely beautiful; in neatness and fineness of form perhaps superior to the improved Short Horns. The Dons are likewise, though considerably smaller in size, yield, in compactness of shape, in quickness of movement and muscular strength, and in softness of hair and beauty of coloring, to no other race known among us. They are the prevalent race of our country; and in an extraordinary instance, when I had the singular pleasure of seeing three hundred yoke of these cattle—that is, all more or less of this breed—in one team, in Connecticut, I could not resist the conclusion that a finer team, of the same number of cattle, could not be found in the whole country. I am ready to admit that I have seen some fine yoke of oxen of mixed blood, of the Improved Durham, as fine in appearance, and in reputa-

tion as good animals for work, as any that I have met with; and some individual animals of the Improved Durham Short Horns, both pure and half blood, bullocks, oxen, and cows, which all points have been considered, have surpassed any thing which I have seen. They have approached as nearly to what I imagine the perfection of form in this race of animals as is to be looked for. With good keeping, they come early to maturity, and attain a large weight. The butchers, however, whom I have consulted, give it as their opinion, that they do not follow so well, in proportion to their size, as our own smaller cattle. In my observation, no animals degenerate sooner under neglect and poor keeping; and they require extraordinary feed and the most careful attendance to keep up their character and condition.

The progeny of Bolivar, from some of our best native cows, according to the testimony of a farmer who probably has been more successful in stock than any other man among us, have not proved remarkable for milk or butter; to use his own expression, "they are, upon the whole, above mediocrity." The progeny of Cerebus has been quite various; in some cases very good, in others inferior. Mr. Jaques is of opinion that the excellence of his cream-pot breed is principally to be ascribed to a cross with Cerebus, but on what rational grounds it is difficult for me to discover. Their beautiful color is certainly derived from the dam; and as the distinguishing feature in this stock is the richness of their milk, and this being precisely the quality for which the dam, the Haskins cow, was distinguished above all others, and it not appearing that any stock of Cerebus but when connected with this cow has ever been remarkable for this quality, it would not seem difficult to determine on which side of the house this excellence belonged.

So much sensibility exists in reference to this subject, the dairy properties of the Improved Short Horns, and so much of private interest and speculation is now mingling itself in the judgments which are formed or the opinions given in the case, that, if it is not difficult to speak with calmness and sobriety, it may be unreasonable to expect to be heard with candor and impartiality. My business is however with facts; and having no prejudices of which I am conscious to warp my own views, I shall, as fairly as I can, state those facts which have come generally within my own observation, and leave the conclusions to the honest judgment of my readers. I have already touched on this subject in my First and Second Reports, and the reader will not have a full view of the case, as intended here to be presented, without a reference to them. As to what these cows are stated to have done abroad, it would lead me too far to treat much of that here. When a bull will bring at a public sale one thousand guineas, cows more than four hundred guineas each, and heifer calves over one hundred guineas apiece, we may infer that guineas are more abundant than with us. It would not be an unreasonable suspicion that a fever of the same type which prevailed so alarming a degree among us in 1835-6, &c., and known here as the *multicaulis fever*, may have infused itself into the veins of some of the bidders and competitors of these occasions.

It may be promised that a very large number of these animals have been brought to this country, and some of the highest character, both as to pedigree and attested merits, since persons of the greatest skill have been commissioned to make the purchases, without any restriction as to cost or expense of transportation. As early as 1825 fifty-six of these animals, all of them of high blood, had been exhibited at the cattle shows in Pennsylvania, and before and since that time large importations have been made into Maryland, New York, Ohio, Connecticut, and Massachusetts.* I have seen large numbers of these cattle, and have to regret that I have not been able, after repeated private and public solicitations, to obtain more exact and authentic accounts of their products. From this backwardness on the part of the owners and importers I think there is reason to infer that some disappointment in respect to their dairy properties has been experienced. My belief is, that our expectations in this matter were too highly excited; and that qualities, for which some extraordinary animals among them were remarkable, I mean particularly the quality and yield of milk, were erroneously deemed invariable characteristics of the race. In a former report I quoted the opinion of a distinguished Scotch farmer, Mr. Shirreff, and the authority of a private letter from a competent judge in England. Shirreff pronounces them, in an off-hand way, "the worst milking breed in Britain." The private letter stated "that this breed of stock has not

been held of late years in great estimation for milking. Short Horns are only calculated for the best and most powerful hand; on poor soils they will do nothing."

To these I now add the remarks of Geo. W. Featherstonhaugh, in a letter to Mr. Powell, of Pennsylvania. Mr. Featherstonhaugh, from his acquaintance with the farming interests both in this country and abroad, will be deemed a competent judge. He says "the property of being very deep milkers, there is to be considered accidental, rather than one which can be continued with any certainty in the breed. Take one short horn with another, no breed is more valuable for its milk, or keeps in better condition under the same circumstances; or goes to heat at less expense; or furnishes more money and manure in a given time. In order to keep up these great qualities, we must remember that, in their native country, it is considered indispensable to keep them extremely well, and in a very different manner from the general custom prevailing here; which is, in summer, to leave cattle to help themselves to what they can find, even in the most severe frosts, and in winter, to let them a moderate quantity of hay and straw. In England, where they are less troubled with dry weather than we are, they have always green crops and roots to give them, and they give them in abundance. It is there considered that the higher this sort of keep the better the health of the cow, the richer her milk, the stronger her calf, and the greater the quantity and value of her dung. If all this provident attention be necessary in that moist climate, it is certain that the breed will degenerate with us, if it is not kept in high condition. Hot climates produce shallow milkers; and where exceptions occur, they get poor very fast when indifferently kept, and it becomes more expensive to recover their condition than to keep it up. The wear and tear of condition in deep milkers is very great, and is only to be checked by abundance of succulent food and roots; or, when these are not to be had, by occasional feeds of meal with their hay."

These remarks are so well founded and so much to the purpose, that I have given them at large. That this highly improved race of animals is of all others best suited to our climate, soil, mode of husbandry, and general condition, is a question I shall now pass over; but on the subject of the milking or dairy properties, I will give the most exact returns of which I have been able to avail myself, and shall subjoin an account of what we call native cows, that any one may compare them at his pleasure.

It may be said that the native cows to which I refer are all select animals. I admit that they are remarkable animals; some of them very extraordinary; but in respect to the large majority of them, I have met with them accidentally, and can find in the State thousands and thousands equal to them, if any part of them were done to their keeping. But the truth is, that in general, nothing can be more negligent and mean than the manner in which a large portion of our cows are kept.

On the other hand, it will not be denied that the Short Horns to which I refer, are selected and highly fed animals. It seems not a little remarkable among the many hundreds which have been brought to and produced in the country, if extraordinary dairy properties are the characteristic of the breed, as many of their advocates maintain, and when there is such an extreme eagerness to establish this point, that more of these distinguished examples should not have been given to the public.

Let us look, however, at the facts in the case, and make up our judgment accordingly. In all matters of inquiry or debate, or object should be truth, not triumph.

I. An improved Durham short horn cow (Belina), imported by John Hare Powell, of Pennsylvania, produced in three days 8 lbs. and 13 oz. of butter, which would be at the rate of 20½ lbs. per week. The cow was fed with slop of Indian meal, clover and orchard grass. She has yielded repeatedly by measurement, and so far as can be ascertained by the bucket, twenty-six quarts within twenty-four hours. One quart of her cream produced one pound five ounces and one quarter of an ounce of butter. In one case two minutes, in another case only three seconds, were required to convert the cream into butter.

The butter trial was certainly a short one, and it is to be regretted that it had not been longer continued.

"This furnishing more manure in a given time" is rather an equivocal recommendation! It has once happened to me to know a case where the sale of the manure at a very saleable more than paid for the cost of the hay given to the horses; and the litter was furnished gratuitously by the purchaser to the stable-keeper. I will save the reputation of the farmers in this case; the manure and litter were wanted for a particular use in the arts. This was certainly a novel and economical application of horse-power.

* When such farmers as Messrs. Plimney and Randall say of the former, "that his pastures afforded but a very short time of grass, and that there were two cows ran with his other stock and had no other food than what they could get in these dry pastures;" and the latter, that his pasture, "was so dry that his Ayrshire cow, was poor and short and was obliged to leave her calf to find a few twigs of grass, or overstocked," I cannot but have before me a very striking example for presenting such an evil example to their brother farmers, who are looking to them as fugitives. This is certainly the way they treat their other friends; nor are they at all suspected, from appearances, of subjecting themselves to the same penance. The general treatment of the cows in New England would not be an inapt subject of presentation by a grand jury.

* One hundred and fifty of Improved Short Horns and grade cattle were exhibited at the Fair of the American Institute in New York, October, 1841.

The quantity of milk was very great, though we are left at a loss whether it were wine or beer measure. If it were beer measure, one fifth is to be deducted to bring it to wine measure. The measurement of milk in the bucket is always a very uncertain measurement. This cow was a most extraordinary animal, and it were to be wished that we had returns from others of Mr. Powell's fine stock, and some particular information of the progeny of this cow.

2. The celebrated cow Blossom, an improved Durham short horn cow, owned by Mr. Cadby, in Delaware, is stated to have given in 1840, in one week, 247½ quarts of milk, or more than 35 quarts per day, from which were made 13½ pounds well worked butter. This summer, (1841,) two months after calving, she gave in one week 253½ quarts, or 36 quarts per day, which yielded 17½ lbs. of superior butter. On the 13th of July, fourth month after calving, the following is a record of one day's milking:—Morning, 13½ quarts; noon, 1½ do.; evening, 11 do. = 35 quarts. She gave 16 quarts per day up to the time of calving. This measure is understood to be wine measure. This is one of the largest products on record. In the first case it seems to have required 18 41-53 quarts to make one pound of butter; in the latter case, 14 45-63 quarts. This is a large amount. For the difference in the two cases it is not easy to account. The mode of her keeping is not stated with any explicitness. The owner of the cow is not known to me, either in person or by reputation.

3. My next account is from Pauli Lathrop, of South Hadley, in this State, a farmer distinguished for his intelligence and success, and on whose statements, made on his own knowledge or observation, entire reliance may be placed. I give an extract of a letter, which I have recently received from him:—

"We have now twenty-five head, which are thorough bred improved Short Horns, without the least mixture of other blood, and are, beyond question, as pure blood as can be produced. These animals generally possess great vigour, and are perfect in symmetry. At two and a half years of age, the heifers will average about 1200 lbs., and I have raised one bull calf which weighed 1020 lbs. the day he was a year old. Our stock has been fed upon grass and hay only, with the exception of a small quantity of roots in the winter months. One of our cows is sixteen and two others fourteen years old, and they now exhibit the appearance, so far as constitution is concerned, of being young animals, which I think is conclusive evidence of this race of animals being well adapted to our cold climate."

"They mature early and take on fat easily, and, in these respects, have a decisive advantage over our native stock. To test an experiment between a native and a short horn, I took a cow of each of about the same age, dried them from milk at the same time, tied them side by side at the same manger, and fed them both exactly alike on hay only through the winter. The result was, that the Durham, in the spring, had gained flesh and was in high condition, while the native was in only ordinary condition."

"Their product, in both butter and milk, is much better than I have ever been able to obtain from native cows with the same keep. We have one cow which made more than 12 pounds well worked butter per week in April last, and I have repeatedly converted the cream of this cow into butter in fifteen seconds.—She gave in June last, upon grass alone, 360 lbs. milk in a week, having been milked but twice a day, and the averaged 51 lbs. per day for two months. We have another cow which gave 43 lbs. milk per day through the month of June; and we have still another (now quite old,) which a former owner has assured me has given 28 quarts of milk per day. We have two heifers, with their first calves, which averaged 35 and 37 lbs. milk a day, through the month of June."

"I have tested the quantity of cream obtained from given quantities of milk from the above cows, and find it to be 1½ to 1¼ inch from 10 inches of milk. There are some persons who deceive themselves, and doubtless others who are guilty of deception knowing it to be such, in representing mixed blood Short Horns as 'full blood,' 'pure Durham,' 'thorough bred,' &c. Now it is not sufficient that an animal is called 'full blood,' or guessed to be the breeder of this race of animals, who understands himself, will require evidence of the fact, and such evidence as cannot be called in question."

4. Of the Short Horned cow Annabella, presented to the Massachusetts Agricultural Society by Admiral Coffin, E. H. Derby states, "that he has a perfect recollection of weighing her milk repeatedly in June,

when she had no other feed than what she obtained from the pasture; the milk, morning and night, weighed 4½ lbs. At the same time, we weighed the milk of a very fine native cow with the same keep, which gave 33 pounds. The greatest objection to them in my opinion, is, that they incline to go dry longer than our native stock."

I cannot agree with Mr. Derby in thinking the going dry a long time a constitutional feature in this stock. This circumstance depends not upon the stock but upon their treatment and keep; especially their treatment with their first calf.

5. A short horn cow, imported by F. Rotch, as I understand, then of Lecheville, New Bedford, and owned by C. N. Bennett, of Albany, a farmer well and deservedly known to the agricultural community, was one of the most beautiful and promising animals of the kind that I have ever seen; her pedigree undoubted and carried up to the highest sources. At my request, Mr. Bennett tried her capacities for butter, and in our week in September obtained 6 lbs.

6. A cow, owned by George Johnson of Lynn, of whose pedigree, after much inquiry, I can learn nothing, but whose genuineness as an improved Short Horn I have no doubt, it not of full blood yet very high bred, has produced this season, from 12th March to 12th September, (six months,) 7100 lbs. of milk, averaging 15 beer quarts of milk per day for that time. She is now (November, 1841,) giving at the rate of nine quarts per day. Her feed is now one bushel of mangel-wurzel and half a peck of wheat bran per day, with what they will eat. The butter properties of this cow have not been ascertained, as her milk is sold daily by the quart. She is a superior animal, both in appearance and production.

7. Wm. K. Townsend, of East Haven, Connecticut, had eighteen cows of the Durham Short Horns, full-blooded or in part, which were kept for supplying milk to the city of New Haven. These, in milk, gave a daily average of 110 quarts, besides the milk and butter used in the family. It will be at once perceived how indefinite this account is, though given by the intelligent committee of the New Haven Agricultural Society. We are at a loss to know how many cows were in milk at a time, whether all or a part only, and how much butter and milk were used in the family. The family, it is said in another place, was large.

I have had the pleasure of seeing this remarkably beautiful stock. Their appearance was in the highest degree favourable to their character and keeping. The average return of milk, as above, was 629 quarts per day, exclusive of the required quantity.

8. I subjoin an extract of a letter from one of the most intelligent and public spirited farmers in New England, Henry Whitney, of New Haven, giving an account of his Improved Short Horn stock.—Perfect reliance may be placed on it, and it will be read with much interest. Mr. Whitney's personal improvements in agriculture and gardening, his liberal expenditures in his importations, with a view to improve our live stock, and the intelligent and efficient aid which he is rendering to the great cause of an improved husbandry, entitle him to the grateful respect of the agricultural community. Many men are like the spinules in a factory, which make a great deal of buzzing and racket, yet perform a very humble part. Mr. Whitney, without noise or ostentation, moves with the force of a power wheel. He turns the spinules, while the little things, with their heads always raised, imagine that they fly round of their own accord. Those who would give honor to whom honor is due, it is not worth while to overlook them. They perform their part well, and their operation is essential. The Connecticut agricultural loan is now turning out many a beautiful and substantial fabric.

"I have never kept an accurate account of the milk given, for any particular length of time. The calves generally have been allowed to suck until three or four months old, after which it was given to them from the pail until 8 or 9 months had expired."

"I have imported four cows, all of which were carefully selected in England, and at high prices.—They have all produced one or more calves since I have owned them, and with one exception they have been dropped in winter. Strawberry, a cow you saw at Northampton, calved in July, 1840, and I carefully measured the milk from each soon after calving, and they have averaged from 22 to 29 quarts per day. Betsey, the first cow I imported, gave in January 1839, soon after calving, 29 quarts, and 1 month afterwards, she was giving 20 quarts. Her milk was only of a fair quality. She continued to milk very largely until within a few weeks of slipping her calf, which occurred about the 7th or 8th month after tak-

ing the bull, when she again increased, and afterwards diminished to 16 quarts."

"My second cow, Violet, gave, after calving, 24 quarts of very rich milk, and continued to milk deeply for three or four months, when the quantity was diminished to 10 or 12 quarts per day."

"My third cow, Strawberry, gave by measurement 22½ quarts of milk on the grass she could pick from my short pastures. Her milk was very rich and yielded a large amount of butter, though I cannot say accurately how much, as it (the milk) was not all brought to the house, and a fair proportion was used for ordinary purposes in the family. Mr. Lathrop, on whose farm, at Hadley, she remained four or five weeks, wrote to me on her return as follows:—'I must speak in the highest terms of Strawberry for a milkster, and butter cow. As for size and shape, she speaks for herself.' She is without doubt, a very superior cow. She was at Hadley in October, 1840."

"My fourth cow, Ringlet, calved about a year since, producing twin heifers. She was milked twice or four times, giving from 10 to 12 quarts each milking, when she fell sick with the milk fever and was two or three weeks before she recovered. During her illness she bruised one of her teats so badly, that she has lost the use of it. This cow is undoubtedly the best milk cow I have; but as the calves have sucked her until within a very short period, I cannot give my particulars. She is now five months in calf; her twins are one year old, and she gives now from three teats 8 quarts per day. You will please understand that I measured the amount with care, full beer measure, purposely for my own gratification and without getting any extraneous for the purpose of increasing the milk."

"My cows were fed in winter on cut straw with corn or oat meal mixed—say half a peck of corn meal to 4 bushels of finely cut straw and about 2 quarts of oat meal added. About a bushel was given to each cow once a day, and 3 pecks of turnips or rutabagas twice a day to each, besides a little hay. This was my feed when they were in the greatest flow of milk. In summer they are out at pasture, and when it is short, corn stalks and other green feed are given to them.—On our dry soil, however, it is difficult for the Durhams to thrive when the summer droughts commence. They suffer, too, much from the heat and from the stings of flies, which almost set them crazy. They stand our winters fully as well as our common cattle, and put on flesh very rapidly at that season, if well fed."

"My calves, at a year old, weigh from 70 to 1050 lbs.; and I feel confident that a thorough bred Durham steer can be made to weigh as much at three or four years old, as a common steer at five or six. There are certainly objections to the breed where pasturage is short and a full supply of hay is not given. They are greater consumers than the common cattle of the country, but they are of much greater size, and, as said before, mature much earlier. My cows are mostly udder-bred animals, thorough bred. I enclose you the pedigrees in full, of Strawberry, Ringlet, and Violet, as requested."

9. Cow. Levi Lincoln, Worcester, 1825. A cross from Denton on a superior native cow. "This cow has often given from 24 to 27 quarts of milk per day of excellent quality, yielding a large proportion of cream. The least quantity of milk given by her in any one day during the summer drought, on grass-land only was 13 quarts." [Mr. Lincoln states to me that this was her measure.]

"For the dairy and the stall, he speaks with the utmost confidence of the pre-eminence of Denton's stock. One of his 3 year old heifers (a half or three fourths blood) gives from 16 to 29 quarts of the richest milk by the day since calving; the other a little less, from the circumstance of having been in milk continually for more than a year; but her milk is in no degree inferior in quality. The last season she gave eleven quarts at a milking, with grass only, and this not unfrequently."

Mr. Lincoln likewise states to me, that on putting six of our best native steers, purchased from Vermont, and six others of the mixed blood of Denton into the same open yard in the fall, and keeping them through the winter at the same manger, on the same feed, and in the same exposure, the growth and condition of the mixed bloods in the spring were greatly superior to those of the native stock."

10. Cow. Dolly. George Hood, Lynn. "Dolly had her first calf in April, 1833, before she was two years old. In the following June she gave 14 quarts per day, measured a number of days in succession, and made 10 lbs. and 2 oz. of butter per week. She calved in October, 1839, and from the 15th of that month to April 13th, 1840, 180 days, she gave 16 quarts per

*To have made the trial exact, the two cows should have been weighed at the beginning and end of the experiment. Their food likewise, should have been weighed at least for a portion of the time.

day, which sold for \$180. In January, 1840, she gave 565 quarts measured out, averaging over 18 quarts per day in the coldest winter month, and three months after she calved. Some days in that month she gave 204 quarts per day. She calved again in December, 1840, and from the 17th December, 1840, to July 11th, 1841, (212 days), she gave 3004 quarts milk, being 11 1/4 quarts per day for seven months, which was sold for \$168.67. Her milk is rich and makes delicious butter.

"She is used to three pecks of sugar beets and carrots per day, with good hay, and in the coldest weather a bucket of warm water with a quart of shorts in it. Dolly is remarkable for transmitting her milking qualities to her offspring. Three of her calves have been raised here, and they are all great milkers. One of them, called the Countess, gave last winter 14 qts. per day for some months after she calved, being four years old. I have a heifer from her, 15 months old, and a bull 11 months old from Dolly, both sired by Wycomet from Mr. Wells's stock. They are fine milkers, and I expect to get a good stock from them.

"Dolly's color is light red, with a few white spots. She has the fine mellow skin, beautiful proportions, and majestic mien, peculiar to the noble race from whence she sprung."

11. Cow. D. N. Breed, Lynn, 1841. This cow is supposed to be one-fourth of the Durham blood -- (one subject is given as her product:

1839. April 15. I bought a cow 6 years old this month.	
15 days in April I took from the cow more than she	30 qts milk.
all received,	30 qts milk.
May 31, 31 days, average 14 qts pr day,	424 "
June 30, 31 " " " 16 " "	450 "
July 31, 31 " " " 13 " "	403 "
Aug. 31, 31 " " " 12 " "	372 "
Sept. 30, 30 " " " 11 " "	330 "
Oct. 31, 31 " " " 10 " "	300 "
Nov. 30, 31 " " " 10 " "	300 "
Dec. 31, 31 " " " 9 " "	279 "
Jan. 31, 31 " " " 9 " "	279 "
Feb. 28, 28 " " " 7 " "	116 "
March 15, 15 days,	30 "

3,503 qts milk,
12 months; cow calved April 10, 1840.
(Continued next month.)

The Colonial Farmer,
devoted to the Agricultural Interests of Nova Scotia,
New Brunswick and Prince Edward's Island. Vol.
1, Nos. 1 to 5, November, 1841.
We are glad to welcome this new recruit to our
ranks. We care nothing for geographical or political
issues where the great interest of the common brother-
hood of mankind is concerned; and that interest is an
improved Husbandry. One of the king's of England
shed to see the time when every one of his subjects,
even the meanest and humblest, should have when he
eaten, a roast fowl smoking upon his board. So
could we as far as possible multiply the products of
the earth, and extend their full enjoyment to every
one that labors for them. We rejoice therefore in
thy effort, wherever and however made, to make the
earth more productive, so that plenty and comfort may
rule where prevail; and then we should desire such
reform in the political institutions of all countries,
at they who by their sweat and toil produce the
wealth should be first served; and that all those politi-
cal contrivances should be abolished by which bread
so often intercepted in its way to the laborer's mouth,
he is left to starve in the midst of abundance.
Nova Scotia has great agricultural resources. John
Young, a few years since, in 1819-20, in his letters
described the assumed title of Agricola, pointed these out
the Nova Scotians in an admirable manner; and
used a spirit of improvement, whose vitality and ac-
tivity are attested by this publication, and by the es-
tablishment of the Dartmouth Agricultural Society,
the head of which they have placed a zealous and
efficient advocate of agricultural improvement, our
respected friend John E. Fairbanks.
Agricola showed that the agricultural resources of
Nova Scotia were abundant; that her soil was adapted
the production of the finest of wheat and the best of

stock; and that she had at her very door, in her gym-
nasium and line, the most sure elements of success. The
redeemed salt marshes on the shores of the Bay of
Fundy, converted by drainage and dyking into most
productive mowing and arable lands, have long been
celebrated as among the finest triumphs of agricultural
skill. Potatoes likewise must always be a great
crop in the productions of this country. Their cold
and moist summers and their calcareous soil are pecu-
liarly favorable to this plant; and we award to the
Nova Scotian potatoes the palm of excellence above
all others, which we have eaten. We have cheerfully
paid a dollar a bushel for these "white blue noses" in
preference to buying our own at twenty-five cents.
The directions given in the 5th number of the Col-
onial Farmer respecting the cultivation of potatoes,
have somewhat amused us, where it is advised to have
salmon lines stretched across the field, in order to
make the rows straight, &c. &c. This is a little too
much in the *kid-glove* style of agriculture. A good
Scotch ploughman, of which we know there is no
want in Nova Scotia, would with his plough open a
furrow for the planting in a tenth part of the time, as
straight as any fishing line could be drawn even with
a spermatic whale at one end of it.

The paper is well got up. It is filled principally
with selected matter, which is well chosen. We,
though liable to the same charge, object strongly to the
size of the type, as quite too small and crowded.
Much of a farmer's reading must be done in the even-
ing. He will be repulsed, when the type used is so
small as to try his eyes severely. We are of opinion
that in our anxiety to give our readers the worth of
their money, we crowd a great deal too much matter
into our periodicals. It is very much like filling a
liquid measure to overflowing for the sake of showing
that we are not mean, where all that runs over and of
course is spilled, impoverishes ourselves without ben-
efiting our customers.

"The Orchardist's Companion."
The three published numbers of this splendid work
have been received. It is quarterly, and each number
contains twelve colored lithographic plates, and more
than twice that number of pages of letter press. The
editor and proprietor is A. Hilly, 41 Chestnut street,
Philadelphia.
The figures of the fruits, as paintings, are the finest
that I have seen in any work of the kind. But as ac-
curate representations of individual varieties, they are
deficient, especially with regard to coloring. As this
part of the work is doubtless committed to other hands,
it should receive the more careful supervision of the
editor, or every copy may differ from the original, and
from other copies. Except this care is taken, engrav-
ings will lose in correctness all they gain in splendor,
by coloring. Some old acquaintances represented in
the work, I should hardly have recognized, as for in-
stance, the Washington plum, Prince's Yellow Har-
vest, and the Early York peach; while others, as the
Peach Apricot, and Black Tartarian cherry, are admi-
rably executed in every point of view. But other
copies may vary. All the fruits are represented with
the branch and leaves, and are drawn with much taste.
But the reader must not expect to see equal taste in the
written part of the work, which however contains
many valuable remarks, which are accompanied with
some excellent original communications.
To represent fruit in such a manner as to assist in
identifying the varieties, such only for copying should
be selected, as are a fair average of fine specimens; and
not, as in the present instance, the very finest that
could be found. This may be one reason why some
old well known fruits appear so differently from what
we are accustomed to see, when they are only in their
woman, every-day dress.

But with all its inaccuracies, the work is a noble effort
in the cause of American Horticulture, and no amateur
should be without it. Its cheapness, considering its
style of execution, is worthy of commendation. The
best edition, each number containing twelve colored
plates, is seven dollars a year. The secondary edition,
each number containing only three colored plates, but
otherwise identical with the best, is three dollars a year.
The first furnishes the plates for about fourteen, the
latter for twenty-five cents, each, and the letter press
besides. J. J. T.

New-York State Agricultural Society.
The annual meeting of the New-York State Agri-
cultural Society will be held at the Lecture Room of
the Young Men's Association, in the Exchange, in the
city of Albany, on WEDNESDAY, the 19th of January,
1842, at 10 o'clock, A. M. The annual Address, by
the President of the Society, JOEL B. NOTT, Esq.,
will be delivered in the Assembly Chamber of the Cap-
itol, on the evening of the same day.

On the day preceding the annual meeting, (Jan. 18,) the
Exhibition of Butter and Cheese, together with
samples of Field Crops, will be held in room No. 10,
second floor of the Exchange, at which place must be
deposited, before 9 o'clock, A. M., all parcels offered
for premiums, heretofore published; and at 10 o'clock,
A. M., the several viewing committees will commence
the performance of their duties. The following are
the committees:

On Butter—Alex. Walsh and G. B. Richards of
Rensselaer, Robert Dennison of Orange, M. D. Bur-
nett of Onondaga, and J. M. Sherwood of Cayuga.

On Cheese—C. N. Bement and E. R. Satterlee of
Albany, John Caldwell of Orange, Benj. P. Johnson
of Oneida, and Samuel Perry of New York.

On Wheat, Rye, and Barley—Anthony Van Ber-
gen of Greene, Rawson Harmon, jr. of Monroe, Or-
ville Hungerford of Jefferson, William Parsons of Ni-
agara, and William A. S. North, of Schenectada.

On Indian Corn, Oats, and Potatoes—Henry D. Grove
and Henry Holmes of Washington, Howell Gardner
of Saratoga, Pomeroy Jones of Oneida, and Joseph
Hastings of Rensselaer.

On Root Crops—J. P. Beckman of Columbia, Francis
Roth of Otsego, G. V. Sackett of Seneca, John
Sanford of Onondaga, and L. B. Langworthy of
Monroe.

The above named committees are requested to meet
at the office of the Recording Secretary, (Cultivator
office), at 9 o'clock, A. M., on the 18th, at which time
the Executive Committee will proceed to fill any va-
cancies which may occur.

LUTHER TUCKER, Rec. Sec'y.
✂ Editors throughout the state are requested to
publish the above.

The American Almanac and Repository of
Useful Knowledge, for the year 1842.
Boston; published by David H. Williams. New-York;
Collins, Kears, and Company.

It would be difficult to name a more useful book
than this. It contains all the usual astronomical cal-
culations in any Almanac, together with a great
amount of other most valuable information of a statisti-
cal, political and general character, in relation to this
country and the world. This number, the 13th, and
the third of the New Series, contains the Agricultural
returns obtained by the Marshalls in taking the last
census. They cannot be relied upon as very accu-
rate; but as being as near an approach to accuracy as
can be expected. No man of intelligence, who is in
the world and means to remain so ought to be without
this book on their tables. As to those who choose to
live as the bears pass their winters, we have nothing
to say

Three Experiments in Wheat Growing.

MR. COLMAN.—When I commenced farming, some five or six years ago, having been previously engaged in mercantile and manufacturing operations, I was told by an esteemed friend, who was a thorough practical farmer, that if I intended to grow wheat successfully, I must in all cases plough my land THREE TIMES in summer following; for said he, "if you plough once, you will have 10 bushels, if twice, 20 bushels, and if three times 30 bushels per acre; this may not be the exact ratio, but it is near enough for a general rule." Well sir, I commenced in this way and had fair crops, and set down my friends advice as my golden rule.—my bed of PROCASTES, and I sawed of the legs and extremities of all other plans, until they fitted my theory. My land was a rather light soil, and I used clover and plaster freely; turned in the clover when in full blossom, and gave it two after ploughing.

My neighbor, whose land was of the same description as mine, and who practised the rotation of clover and plaster, used an entire different process; he took off from his field a clip of grass for hay, or sometimes pastured it till about haying time, when he let it grow till about the last of August or first of September; then he gives it a shallow perfect ploughing with a good green sward plough, turning every thing carefully under, and usually rolls it down; within a few days after, and sometimes immediately, drags it once and then sows his wheat.

I was quite determined that his crop should not be as good as mine, but what was my astonishment, when I observed, that from its germination to its ripening, it was as good or better than my thrice ploughed crop, and finally resulted in a greater yield per acre. I then gave it up, as I found others were successfully following the same course.

A little reasoning on the subject rendered the RATIONALE of the process quite apparent, especially on clean clover lays, free from all foul grasses. The young plant has the benefit of the first and entire decomposition of the rich, succulent herbage which was ploughed under; while in the other process of turning over and over, and consequent exposure to the sun, rains, and atmosphere, has its volatile parts more or less exhaled and lost.

Well sir, "thinks I to myself," my rule is infallible as to meadow and pasture lands, which contain June grass, red top, and other foul grasses, there can be no gainsaying that doctrine; but alas for the infallibility of general rules and specifics, and for the mutability of preconceived opinions. An acquaintance of mine is making good crops with once ploughing upon the worst kind of foul grass green sward the country produces, and with considerable less labor than the three ploughing process is enabled to do.

He commences at the usual time for summer following in June, and turns over his land in a good and husband-like manner, and not in the better skelter, hit-or-miss manner in which too much of our ploughing is done, by being run over as if you was riding a steple chase; but carefully and entirely turning every green thing fairly under. It is then left until he finds that the grasses begin to show life through the furrows, when it immediately gets a thorough harrowing, and so on, from two to four times, till the period of sowing, according to the dryness or wetness of the season, and the situation of the land; the surface is left in fine smooth order for mowing, free from those unsightly and troublesome lumps of undecomposed sods; and as far as my observation has gone, the grasses were as well got under as nine tenths of the lands followed by the old process, and is performed with much less labor; for with a good 30 tooth hinge drag, a team will go over from 6 to 8 times as much land in a day as they can plough.

Now sir, in these days of tribulation for farmers, from the depreciation of real estate and low prices of

the produce of the farm, "when we can't get a dollar a day for labor, and it is State Prison for stealing," it behooves us to look about our own interests, and if we can't get rid of our old habits of expenditures, which high notions and high prices have saddled us with, we should at least try if we cannot get our usual quantum of produce with LESS EXPENSE AND LABOR. If the saving of a crop of grass and once ploughing, will give as good or better return than the thrice ploughing process, let those who DARE depart from the old beaten track, try it.

Greece, Monroe Co., N. Y.

P. S. In your next paper I propose to give your readers my three experiments upon raising potatoes, and some of my notions about sorts, soils, productiveness, and their elementary value as a crop compared with the other roots.

AGRICOLA.

For the New Geneesee Farmer.

Ploughing Matches.

MR. EDITOR.—As ploughing matches are now considered an essential part of our Agricultural Fairs and are usually mentioned as that part which excites the most interest, it becomes a matter of interesting inquiry, why they excite so much attention, and whether they may not be improved so as to be still more useful and interesting? I have sometimes felt at a loss as to the cause of the intense interest with which thousands look upon a few teams ploughing, when that is the ordinary every day business of the farmer, and teams may be seen engaged in it almost from one year's end to another. An equal number teams engaged in the ordinary ploughing of the farm would scarcely arrest the attention of the traveller, and would perhaps only elicit a single remark, although greater skill were exhibited in the performance, and teams and ploughs better adapted to the work. It is evident that it is not the *rarity of the show*, nor the beauty or appearance of the teams or ploughs, for these are generally quite ordinary in appearance. Nor can it be in the work to be done; for the ground is usually the most unsuitable for ploughing which can any where be found. The work is beyond the capacity of the team—the plough is not adjusted to the soil, no opportunity being given for regulating the depth and width of furrow which an experienced ploughman is careful to do, and which requires some three or four hours to adjust right. The teams are frightened by the throng which surround them—the ploughman is excited and nervous by being the object of so much observation and remark. The word is given and off he goes at the top of his speed, his plough bounding from right to left and making more *balks* the first time through than he would make at home in a week. Generally the team which is most accustomed to noise and bustle, and the plough which is adapted to no work in particular, comes out first and wins the day.

As to the performance, the judges are saved all trouble of an opinion upon it, as the stamping of thousands of *loafers* obliterate all distinction of furrows.

The contest is over, the premiums paid, and who is the wiser for it: teams are over driven, the land is rather injured than benefited; no information is gained as to easy draft of ploughs, the ability to lay over a furrow or give it the requisite slope, width and depth.

No man is the wiser or better, except those who get the premiums, and they often pay dearly for their money by the harm done their teams. And yet multitudes go away highly pleased with the ploughing match and think it the most interesting part of the exhibition. Would they not be as well pleased had these teams been hitched to logs and drawn, to see which could draw the heaviest log with the greatest speed? And would they not be almost as much enlightened in the science of ploughing?

It seems to me that were our Agricultural Societies

to give this subject a little attention, our ploughing matches might be greatly improved. As in every other art, the watchword must be onward. But these matches are now managed just as they were twenty years ago. If we have made no improvement in using ploughs in twenty years, we have greatly improved the instrument. We have not now the same obstacles to contend with that we had then. Our farms are in a good measure cleared of roots, stump and stones. Therefore it ceases to be a recommendation of a ploughman, that he is skillful in dogging stumps—we require something more. What constitutes good ploughing? Verily, that the soil be equally broken to a uniform depth. This evidently cannot be done except the furrows be straight. For if crooked furrows there is an inequality in the width and of course some parts are more pulverized than others. Let, then, our agricultural societies require these three things in ploughing, viz: that the furrow be straight, and of uniform depth and width. And would suggest that the field be selected beforehand and that a competent committee determine what the depth and width shall be, by an examination of the soil, and let these be published as the rules of the match. If the field be in good condition for ploughing, and the crop that is to follow admit, I would name five inches for the depth and eight for the width and let the premium be awarded to the man who shall the most accurately comply with these requirements. Let ample time be given that the ploughman may go deliberately at his work, and I am greatly mistaken if these matches do not tend greatly to the improvement of ploughing in all its variations, or be equally interesting with those whose principal requirement is speed. Yours, &c.

MYRON ADAMS.

East Bloomfield, Dec. 21, 1841.

For the New Geneesee Farmer.

The State Fair and Western Cattle.

MR. EDITOR.—I observe that Western New York receives severe censures for not being better represented at the State Fair at Syracuse, but I think when all the circumstances are considered, it will seem that much of this censure is not deserved.

It is a fact that the farmers of Western New York are more in debt than those of the Eastern portion and when the times are as hard as at present, it cannot be expected that they can afford to spend as much time and money as would be necessary to take animals to that Fair. Let us, before we go further, see what would be the probable expense of taking one animal there, with an attendant, say from Batavia:—

Fare by Rail-Road to Rochester,	3 00
Expenses of man and beast in Rochester,	1 25
Fare to Syracuse on Boat and feed,	7 00
Expenses in Syracuse 2 or 3 days, say	5 00
Returning to Batavia,	11 25

\$27.50

Thus it will be seen that the expenses for one animal would be as much as the price obtained for 11 pounds of pork or beef. In this estimate no allowance is made for the time or services of the man who accompanies the animal, which would swell the amount to at least ten dollars more—making no inconsiderable sum, if it has to be made by raising pork or beef these times.

I have no doubt but that Western New York is completely with any other portion of the State in producing fine animals; and I for one should have gone that Fair and taken some stock without calculating expenses, had I found others in this country willing to do the same; but I did not like to be the only representative for old Geneesee.

If the farmers of this region had an opportunity like those of the East, for transporting their cattle to Syracuse free of expense, I have no doubt but that

the Eastern farmers would have gone home, minus at least one-half of their prize money. And here I would remark that the liberality of the managers of the Rail Road from Albany to Syracuse cannot be fully appreciated by the farmers of this state, and yet I am fully convinced that it was in the end redound to the advantage of the company, as will every thing which is done to increase the productive resources of the country. I hope the managers of the other rail-roads through the state will consider this subject, and on similar occasions hereafter, imitate the noble example of the Eastern managers.

Your devoted reader and subscriber,

BUTANA, N. Y.

J. N. FERRIER.

The Syracuse House.

To the Editors of the New Geneva Farmer:

SIRS—I have just discovered in the last number of your valuable paper, an article headed "Accommodation at Syracuse—a man charged a dollar a meal," and signed by "A Member."

In one paragraph in this article, the author states "we found ourselves very modestly charged at the rate of about one dollar a meal, including breakfast and supper, throughout."

Who the author of this article is, or what was his object in making the above statement, I am at a loss to determine. The house referred to, where this exorbitant charge was made, is evidently the Syracuse House, which is kept by me. Aware that there was some mistake with regard to this matter, I have, since the above article came under my notice, made special enquiries of my book-keeper, who receives all bills at my house, and by him I am assured that no single instance of the kind above stated, occurred during the Fair.

To such persons as only came to dine, a dollar was charged for the dinner. But when gentlemen had put up at the house, and in all other cases, no more than the usual charge was made; and in no instance whatever, was a dollar charged for breakfast or supper, as stated by your correspondent.

In those cases when a dollar was charged for a dinner, it was not for the purpose of excluding any one, or, in the language of your correspondent, "to secure select company," but because the occasion being an extra one, an extra outlay was required to provide for it.

That no unjust imputation may rest upon me, you will do me the favor to publish this statement, and assure your correspondent that if he or any other individual will produce an instance during the Fair where charges were made in my house other than as above stated, I will refund double the amount of any such bills.

Very respectfully yours,

P. N. RUST.

Syracuse, Nov. 23, 1841.

Remarks, by the late Editors.—In relation to the "object" of "A Member" in writing the communication referred to, and especially our object in publishing it, we can assure Mr. Rust it was not to gratify any feelings of ill-will towards him, or a desire to injure his house; but observing at the time that much dissension prevailed on account of the charges, and that some blame was attached to the managers of the Society, we were desirous that such notice should be taken of the matter as would tend to prevent like cause of dissension hereafter. We sent Mr. Rust's letter to "A MEMBER," and he returned it to us with the following remarks enjoined:—

"I can only say in reply to this communication, that I was charged at the rate of about one dollar a meal—that is, throwing out one or two things, which I do not know were reckoned or not, the bill would amount to what I have said; and I was told by others that they were charged similarly. Whether the man

who made the charge was the regular book-keeper or not, I cannot say. Your correspondent says, 'when gentlemen put up at the house, and in all other cases, (than dinner) no more than the usual charge was made.' The usual charge where? At the Syracuse, or at other houses? Is the usual charge at the former, for breakfast or supper, seventy-five cents? Again, a dollar was charged for dinner, to cause 'the occasion being an extra one, an extra outlay was required.' By this rule, the merchant must be higher when his custom is large—the farmer who feeds a hundred head of cattle, must charge more per head, than he who feeds but one—and division of labor becomes a loss instead of an advantage. I thought tavern keepers always practiced a good custom, to a scant one, and could make more money at given prices with a hundred boarders than with three."

For the New Geneva Farmer,

Valuable Pear Trees.

"I don't want any pear profits set," exclaimed the old gentleman, "I shall never live to see them bear." In the early statement of this place, although we had a few apple nurseries, but these mostly of natural fruit, yet a choice pear, plum or cherry tree was not to be had. About this time, (30 years ago) one of those itinerant grafting men, so common of late years, came along engraving for all who would employ him; and although, unlike some at the present day, he did not profess to have any of the most choice varieties of fruit known, yet it cannot be denied but he had some good kinds of apples and pears. He was employed by my father to set some apple grafts, and when his job was nearly completed, he asked my father whether he would have a few pears grafted. "No," replied the old gentleman, "I don't want any, I shall never live to see them bear." On being again urged to have a few set, he replied, "Well, I don't care, perhaps some of my children may live to see them bear." Accordingly, a few were set on the stocks of the wild thorn, cut down below the surface of the ground. Three of these survived and are now large trees.

And here let me stop to enquire whether the investment has been a profitable one. They cost when set, say 25 cents, and these three trees are now worth at least three hundred dollars. One hundred dollars may be thought a great price for a pear tree, but we must value fruit trees as we do other property, according to the net profits derived. A pear tree 30 years old from the graft, may be supposed to hardly have reached its prime, probably will continue in full vigor and increase in value for 20 or 50 years to come. Probably the most valuable pear trees in the western country, are now growing near Detroit, and are supposed to be upwards of an hundred years old.

But to return to my story; two of the three pear trees were owned by my father at the time of his decease, which happened near four years ago; and although at the time they were engrafted, he was quite sure he never should live to see them bear, yet he enjoyed the fruits of them for many years. One of these trees, called the Autumn pear the year before his decease, produced twenty three bushels of pears; the other, called the Orange pear, produced about half as many. Since then, the Autumn pear has produced as high as thirty-five bushels in a year; and they are never worth less than one dollar per bushel. The other two trees are of the Orange pear, and although much exposed to the depredations of certain two legged animals which it is quite impossible to fence against, and although only producing about half the quantity of fruit as the former, yet the fruit is of a superior quality, and often sells for two dollars per bushel.

Now I ask, are these trees worth \$300? Where can we find an investment of \$300 that produces a greater income? A year or two previous to the old gentleman's death, on seeing his trees loaded with

fruit, I called his attention to the history of these trees; and when I repeated the expression that heads this article, he replied, "Ah, if instead of three or four I had then had one hundred, they would now be worth a fortune; yes, a fortune—worth more than the best farm in this country."

A writer in the Farmer asserts that a choice pear, cherry or plum tree cannot be found on one farm in four in Western New York, and which, for aught I know, may be true; yet for the last few years I have had ample demonstration that shows most conclusively, that an increased attention has been given to procuring choice varieties of fruits. And even as regards the pear tree, the expression that heads this article, is now rarely made.

B. HODGE.

Buffalo Nurseries, Dec. 21, 1841.

For the New Geneva Farmer.

Agricultural Meetings.

Our annual agricultural exhibitions are profitable and interesting; but they have a direct influence upon but a small portion of the community. It has often occurred to me that meetings of a more local character, in which farmers could convene and relate their experience, discuss specified subjects, and compare their views generally, would be attended with happy results. If circumstances would permit, could the intelligent Editor (who will be most cordially welcomed in Western New York) better subserve the interests of the cause in which he is engaged, than by making a series of appointments in such towns as he may think proper, and thus set this ball in motion?

W. R. SMITH.

Macedon, 12mo 23d, 1841.

White Carrots.

Are every way worthy of culture, yield much better than the Orange, and on light soil, are as easily gathered as turnips, and then such winter butter as the cows make when fed on them! Just call in some long evening, friend Editor, and examine for thyself.

Straw.

How can I make my cattle eat straw? I have often asked of some experienced farmers. "Give them less hay," was the general reply. Not liking this mode however, and knowing that good farmers in England and this country made free use of straw as food for cattle, I resolved last summer, when threshing, to change my plan. I stacked it as usual, but in the progress of the work, sprinkled on from one to two bushels of salt. I used the "Fitts Thresher," which gave me the additional advantage of mixing the chaff through the whole. Well, during the warm weather in the first part of this month, my cattle, instead of wandering about with but little appetite, might be seen any day eagerly engaged in filling themselves with straw. At night, when the cows were tied up to receive their rods, their hay would be almost untouched. Their rotund appearance left me no apprehension of their starving, however. This was continued until nearly the present time, when I was obliged to reserve the remainder of the stack for the use of the stables. Nearly a month's feeding of hay was saved.

W. R. S.

Root Culture.

Among the premiums awarded at the Agricultural Fairs in the State of New-York, we notice the following valuable products:—Mangel Wurzel, 1600 bushels; Sugar beet, 1160 bushels; Ruta Beca 1200 bushels; Carrots 720 bushels; Potatoes 400 bushels. These products, considering the dryness of the season, are remarkably good, and go to prove the truth of what we have often maintained—the great advantage which would result to the agriculturist, were he to devote a few acres to the culture of roots for winter provender for his stock. The degree of comfort such a course would secure to the animals generally, and the profit arising from the increased quantity of butter and milk which would be yielded by the milk cows, are considerations which none who are regardless to their interests, will, we are sure, overlook.—Am Farmer.



ROCHESTER, JANUARY, 1842.

To Readers and Correspondents.

The non-arrival of Mr. Colman must serve as an apology for any deficiencies that may appear in this number. Our readers may rest assured that full amends will be made hereafter.

Our acknowledgements are due for the good number of valuable communications received during the past month. Some of them requiring Mr. Colman's supervision are necessarily deferred till our next. *Agriculture* is welcome to our columns; we hope to hear from him (and others of our friends) often. Quite a number of inquiries, notices of periodicals, &c., are awaiting editorial attention, and for the delay of which we claim indulgence.

Mr. Colman intends leaving Boston in time to attend the meeting of the State Agricultural Society at Albany on the 18th and 19th inst., and then coming to Rochester.

Cream Pot Breed of Cattle.

Samuel Jaques, of Charlestown, Mass., at his Stock Farm near Boston, proposes to offer on the 10th of January instant, at public sale, a large number of Cows and Bulls of his improved stock. These animals have been bred with great care. They are descended from an Improved Durham Short Horn Bull and one of the best cows ever owned in Massachusetts. This cow was most remarkable for the peculiar richness of her milk, and its large proportions of butter properties. Mr. Jaques assures the public that the progeny partake of the qualities of their ancestry. They are generally of a deep red color and more than medium size, and are without doubt, among the best cattle to be found in New England. The sale will offer a favorite opportunity for persons who wish to improve the character of their milking stock. This attempt of Mr. Jaques is probably the first systematic attempt made in the country to form a superior dairy stock. Several of his animals are of the fifth generation.

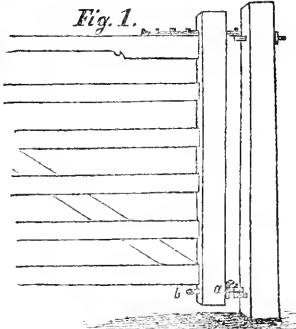
Gate Hinges and Gate Fastenings.

Most of our readers may have seen an estimate of the relative cost in using bars and gates for one year, and the consequent economy of the latter. It may be easily conceived, by thinking of the labor required to open and shut a set of bars five hundred times in immediate succession, and then the same for a gate. A very good thing was mentioned in a late number of the Cultivator, of R. W. Scott, a farmer of Kentucky, every field of whose farm was entered by a well-hung, self-shutting, and self-fastening gate, and each field numbered conspicuously on the gate-post.

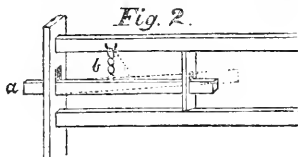
Many gates are passed twenty times a day, or more than seven thousand times a year, and it is a matter of some importance whether they shut easily or not.—half a minute spent in dragging a half hung frame over the ground, and crowding a pin with difficulty into a snug hole to fasten it, amounts, in such a case, in one year, to no less than one full week of hard labor.

HINGES.—As a corrective to the falling of gates from their original position, the following is a good, but not new mode, though but little known and used. Fig. 1, represents the part of the gate attached to the post, and the hinges; the eye *b* of the lower hinge has a screw cut upon it, and by means of the nut *a*, the

gate head may be elevated or depressed at pleasure.—This is often very convenient when the gateway is obstructed by snow.

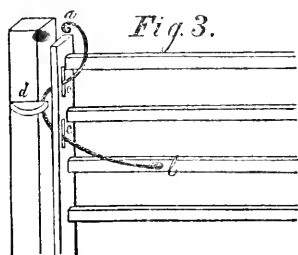


In order that a gate may be self shutting, it should be hung as follows:—Having set the post upright, draw a plumb line on the face of the post, and by this line set the hook of the upper hinge; and the hook of the lower one two inches from this line, on the side to which the gate opens; this will cause it to fall shut, while opened less than ninety degrees or the quarter of a circle. To continue this tendency to fall, when opened still wider, let the upper hook project four inches from the post, and the upper eye or loop two inches from the gate; the lower hook project two inches, and the lower eye four inches. A gate thus hung will fall shut through the half circle.



FASTENINGS.—These are almost as various as the mechanics who make them; and are of all grades, from the leather strap tied round gate and post, to the well made spring—latch shutting with all the precision of a mortise lock on the house door.

An excellent latch for a farm gate, in frequent use, is the horizontal wooden bar or bolt, suspended either at the middle or at each end, by a short chain and staples, and sliding through a mortise in the gate-head, into a corresponding mortise in the post. When drawn back in opening, the chains being thrown from the perpendicular, the weight of the bolt throws it back to its place. Fig. 2, represents this fastening; *a*, the bolt; *b*, the chain. The dotted lines show the place of the chain and bolt when the latter is drawn back.



The fastening represented by Fig. 3, has been found, by the writer, simple, cheap, and effective.—*a* is a rod of iron, half an inch or more in diameter,

bent as shown, passing through the two narrow mortises *c c* in the head of the gate, and moving on a pin at *b*. When the gate is thrown shut, this iron latch strikes the projection *d* on the post, and is lifted backwards; its weight causing it to drop forwards as soon as the gate is shut. Such an iron rod, for a large farm gate, need cost but a shilling or two, and any farmer of ordinary skill may bend it to suit his fancy, by beating it in a stove, with a few minutes work. It may be made much shorter than represented, if desired.—Besides being cheap, and never liable to get out of order, a little sinking of the gate, not affecting it, it is easily opened by persons on horseback. J. J. T.

For the New Genesee Farmer.

Steuben Co. Agricultural Society.

MR. EDITOR—I send you a notice of the first annual Meeting and Fair of the Steuben County Agricultural Society; also a notice of the last meeting of the Society's Board. It is not yet a year since the question was raised in good earnest by a few enterprising citizens of this county, whether they should have such a society or not. This circumstance, together with the fact that the great mass of the farming community felt but little or no interest in the subject, put it out of the power of the Society to say what, or how large premiums should be awarded at its late fair. But feeling that such an exhibition as, by the blessing of God, they might be able to make, was the best, if not the only means in their power to awaken interest in behalf of their cause, the Board appointed Wednesday, the 10th of November last, as a day for the election of new officers, and for exhibiting such animals and articles of domestic manufactures as those who were already enlisted, or who would then enlist in the cause, might see fit to make.

The wisdom of this step has since fully appeared. The day was highly propitious, and at an early hour it was seen that the most sanguine had failed to imagine the deep interest that was everywhere being manifested in the operations of the day. Our list of names was swelled to one hundred and eighty-three; and the cattle, horses, sheep, hogs, &c., that were presented would have reflected honor upon a society of *more* days.

The following is a list of the officers that were chosen for the present year:

Lazarus Hammond, President. Otto F. Marshall, Israel R. Wood, Lyman Balcom, Vice Presidents. Zibact Leland, Corresponding Secretary; Theron Loomis, Recording Secretary; Henry Brother, Treasurer.

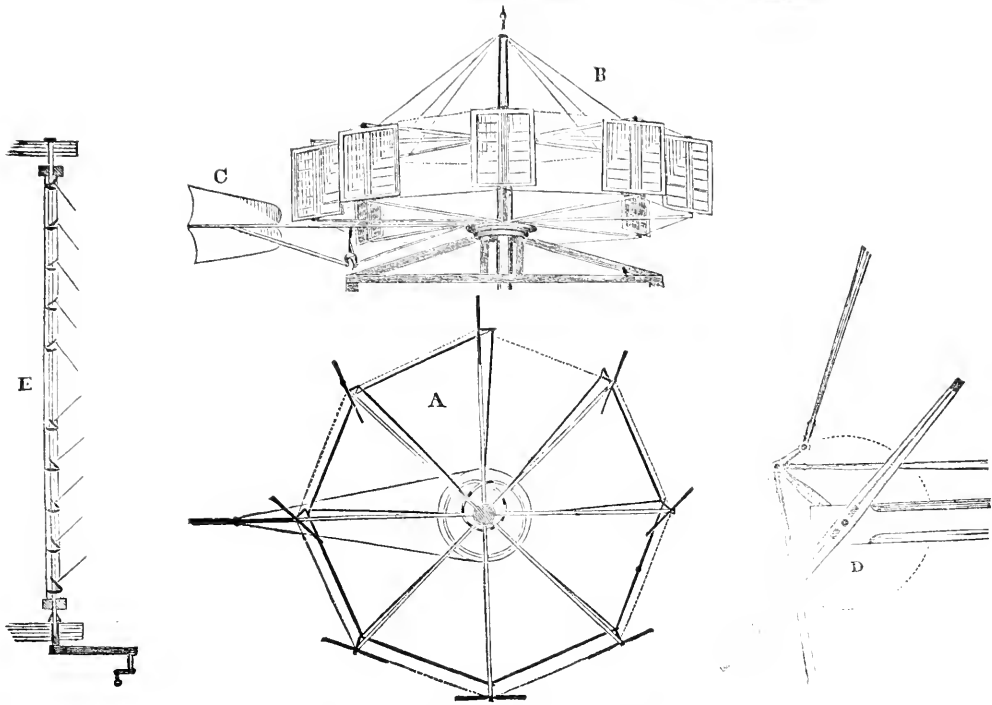
EXECUTIVE COMMITTEE.

Henry Wambaugh, Lay Noble, Elias Mason, Samuel Cook, Warner Patchen, John McBurney, Sherman Rose, Jacob Van Valkenburgh, Orlando Comstock, William Dixon, William Kernon, Arthur H. Erwin, Amos Lewis, Albert C. Morgan, Stephen Kent, Nathaniel Mallory, Levi Davis, Harvey Andrews, Samuel Mathiolen, Otis Thatcher, Daniel N. Bennett, Joel Canington, Johnson Reynolds, Wm. Hastings, Hiram Merriman, Jason Chamberlin, Amasa Stanton.

I send you a paper containing a list of the premiums awarded at our recent Fair.

(Received but have not room to publish.—Eds.)
T. LOOMIS, Rec. Sec'y.
Bath, Steuben Co., N. Y. Dec. 25, 1841.

"The Chautauqua Co. Silk Journal."—We have received the first number of a paper with this title, published at Dexterville, N. Y. by Edwin P. Lord. Mr. L. is said to have been many years engaged in the Silk business, and he appears to understand it thoroughly. He gives some interesting statistics of the extent and success of the Silk Culture in Chautauqua and some other counties; and if his paper is supported as it deserves to be, it will tend greatly to encourage this important cause.



NEW HORIZONTAL WINDMILL.

The use of wind power for propelling machinery, is a subject of considerable importance to the Agricultural community, although it is one that has received very little attention. Indeed we have often wondered that more use is not made of this cheap and powerful agency in this labor saving country. In those parts where water power is scarce, wind power can be made a good substitute for driving ordinary Mills and other Machinery; but in addition to this we believe it might be used to great advantage on many of our large farms for such purposes as cutting fodder, grinding corn on the cob, sawing wood, pumping water, &c. &c. The principal objection to using *Old Boreas* we apprehend is, not that he is unable or unwilling to work, but the difficulty of *harnessing* him so that he can be easily managed: we wish therefore to suggest to our readers a plan for removing these objections. The above cuts (form) led us by the N. Y. Mechanic represent a very beautiful and ingenious contrivance, of which it is said "all the difficulties heretofore existing in the Wind Wheel, have been overcome. The inventor not only claims this as an improvement on all others, but that it is the "ne plus ultra" in Wind Wheels. The advantages are as follows: Firstly, every sail is at all times geometrically correct as to its position to the wind to exert the greatest force in propelling the Wheel; its power is double that of any other Horizontal Wheel. Secondly, the sails are so constructed, that they open at a given pressure, and "flow" the excess of wind to pass through. Thirdly, it can be stopped instantaneously, and as quickly be again set in motion; in the same wind it will move with different degrees of power: for instance, if you have wind sufficient to run four run of stones, and your Mill is set to that power, you can instantly reduce the power of the Wheel to drive two run of stones with the same speed that it drove the four run with.

EXPLANATION.—A, is a plan of the Wheel; B, an elevation in perspective; C, the vane, supported by a pitman, and connecting rods, are attached to the crank; E, represents a section of the mill, showing the manner in which the slats open when the pressure of the wind is greater than required.

For further information and particular description, or for the purchase of Rights, inquire of the subscriber, at 203 Delancey, or 31 Ann street, New York, (if by letter, post paid.) JOHN M. VANOSDEL.

New York, December, 1841.

News from England.

The Steam ship *Columbia* brought London dates to the 3 Dec. and Liverpool to the 4th. The news is not very important. Trade was very dull and Money in great demand. The prices of flour and grain had declined.

The Banker's Circular announces that a strong conviction prevails that "the present government will recommend to parliament a material alteration in the existing corn laws."

It appears by the late advices from England, that poverty and distress, to an extent which can hardly be conceived of in this country, continue to exist among the lower classes in the populous towns, and many are actually starving in the streets—others are induced to commit crimes in order to relieve the sufferings of their families.—The following is an extract, presenting an appalling picture, from a late English Journal:

"On every hand we hear of the abounding of disease; and not only so, but of its rapid and alarming increase. It is not one particular branch of industry that is assailed—it is not the trade of one particular country—but all seem liable to be involved in the widening and destructive circle. Tales of woe and suffering, that are almost too horrid for belief, are repeated

from the West Riding of Yorkshire, whilst Lancashire awakens echo with the painful response. From Paisley to Spitalfields, a cry of all but absolute famine prevails."

Again we are told that the debtors' prison in Newcastle, Durham, Lancaster, &c., are all crowded to excess, from the commercial failures which have taken place within the last year. Another London journal tells us that on the 28th ult., there were 714 persons confined for debt, in the five metropolitan prisons!

How long will this state of things continue? The wealthy landed proprietors, and the lords of the princely halls and the immense estates, will not part with their worldly inheritance, to relieve the poor and humble operatives, who are willing to work for a mere pittance, but even that privilege is denied them. The only remedy left appears to be emigration, and shiploads of poor Englishmen are every week sent to Australia or the provinces in North America—and many find their way to the United States.

MARL IN VERMONT.—It is said that a bed of shell Marl has recently been discovered in West Albany, covering a tract of at least fifty acres, and it appears to be nearly inexhaustible.

He is gently learned who has learned how little he knows.

NEW-YORK MARKET, Dec. 22.

FLOUR AND MEAL.—Since the arrival of the last steamer there has been no demand for export, and very little for home use; and as there is a disposition on the part of some holders to press sales, prices are again unsettled and we reduce our quotations fully 12 cents per bush. We quote Genesee and Ohio \$5 a \$6 1/2; and Troy and Michigan \$6; the latter is scarce.

CATTLE MARKET.—At market 600 head of Beef Cattle, including 60 left over last week, 200 of which was from the South and the balance from this State; 35 Milch Cows and 2000 Sheep and Lambs.

There was some further improvement in good Beef, but the common and inferior qualities are without change.—Sales of 750 head at \$5 to \$7 1/2, averaging \$5 the 100 lb.

MILCH COWS.—25 were taken at \$25 to \$35 each. SHEEP AND LAMBS were mostly taken—Sheep at \$150 to \$140; Lambs at \$1 25 to \$3 each.

HAY.—The market has been well supplied, and sales have ranged from \$7 1/2 cents to \$1 1/2 the 100 lb.

CINCINNATI PORK MARKET.

The Cincinnati Gazette of the 22d December states that the business of Pork-packing at that place is going on very briskly; "that the slaughter-houses are in their glory;" "that the slaughtering is on so large a scale that Deer Creek runs with blood, and the purple current is to be found in the water of the Ohio flowing by itself a mile and more from the slaughter-house!" About 4000 head per day were brought in during the week previous, and the prices were rather on the rise, \$7 25 and \$2 40 being paid for best qualities.

Swelled Fruit Buds—Peach Trees—How to Read.

[I have of a letter from Cuyler Co. N. Y.]
At page 161 of your last volume, it is mentioned that *Juliane* pear tree had, in its leaves during the drought (as it would have done in Autumn) but revived by subsequent rains, it had taken a new start (in spring), and that one bunch had come into full flower. From the same cause, the fruit buds of the cherry, apricot and peach are much swelled in this quarter; and those of the last especially, are so far advanced that a few days of mild weather would be sufficient to expand them.

Whether they can survive until spring, or not, must depend on the temperature of the winter; but unless it should be unusually mild, I shall entertain no hopes of a crop next season. The exact degree indeed, at which swelled buds perish in winter is not known; neither do I know whether cherry buds in the same condition, are harder than those of the peach; but from some recollections in regard to the latter, I believe they are generally safe here, when the cold is above zero.

Some writers ascribe the decay of the peach tree to *budding*; and pretend that seedling trees are more healthy. I have never seen any thing to corroborate the notion. I have trees now in my fruit garden that were budded twenty years ago, and they are as healthy as any seedlings in the country.

On the same day that Congress met at Washington, the crowds held a convention in the woods near this place; and judging from the thousands that attended, I should rather think it a "mass meeting" than an assemblage of delegates. I remember several similar gatherings, which have generally been in the fall, but not continuing more than a day or two. I am not aware that any ornithologist has noticed this circumstance.

On the present occasion they seemed to be in earnest debate, though not more disorderly than some of their better under particular excitement. If they had a speaker, his voice and authority must have been unavailing, for their clamor rose at times, on the wall, like the roar of Niagara.

Having neither pay nor rations however, a protracted session was out of the question, so the adjournment was carried by acclamation, and the duck club passed away. Whether the old resident crows of the neighborhood were engaged in the enterprise, is not known; but they were seen soon after, flying over on their daily excursions, as if, like Gallo of old, they cared for none of those things.

A few days ago, when the ground was bare and well soaked with the late rains, overseers of highways or canal hater for that off, especially if they have the bump of observation, might have been profitably employed for a time, in examining the condition of the Poplar Ridge road—the direct stage route between Auburn and Ithaca. Wherever the ground was nearly in its natural state—that is, had not been disturbed by the plough, the horses could proceed on a trot; but on the contrary, wherever the road had been raised by the scraper, the rutted and the mud was so deep, that the traveler was glad when he got safely through. The contrast was very remarkable.

Now what was the cause of this difference?
Some years ago, I heard one of our Judges, in his testimony before a board of inquiry, say that six years at least were required for a new road to become fully settled on a firm, like one that had long been traveled. This opinion, as the result of observation, had no reference to new roads through the woods; but such as are built up by the scraper, when suds, and muck, and chips and whatever else is at hand, are carried

over promiscuously, and without discrimination or selection into a pile.

Six years for a road to become settled? Why, if this is true, what are our paths now this every year about when they spend the strength of the drought in making *long dry beds of mud* for the earth for us to travel over.

But can it be true that six years are required for a new embankment to settle? If it were made of sound stuff—a clean subsoil mixed with sand and gravel, it would not be long for it would soon become compact; but when it is made of such materials as corn and potatoes delight to grow in, it is true to the letter. The fifth with much of the fine earth has to be washed away by the rains; and not only that which is on the surface at once, but all that which the wading horse and loaded wheels bring up to the surface at another time. All such impurities in the swept away before the road can become firm and good, not sinking under the hoofs of the horse nor the wheels of the carriage.

Now all this interesting correspondence exactly with the condition of the Poplar Ridge road, and with that of every other road in the winter which is much traveled. For many years, I have observed that the best roads are generally those which are the most neglected. Except in regard to bridges, dug ways, and hitching to men of the water, the lowest path-maker is commonly the best, because it is better to do nothing than to do much.

When the State of New York shall waken up in regard to roads, she will manage things differently. She will not allow her expenses to be heavily taxed so needlessly. Skilled superintendents will be paid for their services, and our taxes will be judiciously applied. Thousands are annually wasted through false economy. If her *cash* policy were no better than her *road* system, instead of a revenue of two millions, she would have a line of duck ponds.

The admonition of the prophet, would apply well to our overseers of highways. "*Case to do evil. Learn to do a ill.*" Quit plunging up the sides of the roads, and destroying your sleigh tracks. Use your *scraper-hog* to cut down banks and ridges—*not* *crusts* to haul in suds, muck, and mud. GRAVEL YOUR ROADS; and if the material is not within one mile, go two. Every road is a road look for the present time, for the present age, and for posterity.

Temperance Reform—Home League.
It strikes us that the present is an era of great reforms; great abuses in social life having reached the ultimate point of human endurance, a retrograde movement as the unavoidable consequence has commenced, which promises under a kind providence, to bring back the moral and social health of the nation.

The great ten, temperance reform is the first in order; when the benevolent and God-like of the land commenced their labor in the cause, they despaired of doing any thing more than to make the practice of drinking odious and unfashionable, in order to arrest the young N. b. boy of our presence in his downward course of fashionable delusion. The port-wine drunkard was given up as a pastal power of reform, his habits were considered too chronic to be within the reach of human aid! What is the consequence of this neglect of this unfortunate portion of God's accountable creatures? Verily the words of scripture that the "last shall be first, and the first shall be last," is now in the rapid progress of fulfillment. Who are now the miracle working missionaries in the temperance cause, 'tis true they do not raise the dead, but they perform these miracles which are the "next of kin;" they draw from the kennel of dark the long lost abandoned set, quickening him by the force of sympathy and kindness into a thing of life, and

health, and usefulness! Every distillery is now shut up! The drug shop is now converted from a charnel house of corruption, into the busy mart of life and comfort! The more respectable tavern, now finds its bar-room a boundless appendage, while those of lesser note sink to ruin.

"And make no sign."
The next reform in order is the Home League. Who that has seen blood in his veins, does not feel a thrill of domestic comfort at the very sound of such a name. But alas, it strikes us that its office is not properly understood by those who proclaim its duties. Unlike the temperance reformers, they call upon Government to aid them by prohibitions and restrictions, to arrest that over-trading in foreign finery, which can only be effectually done by a labor of love and the power of domestic example. Blessed would be that home league; verily it would compass more than twenty tails, if it could by the power of its action in the home circle countervail a part of those evils which grow out of the equality of our institutions; I mean the general epidemic for expensive foreign finery, the grinding waste of that ever changing fashion, and unlimited extravagance, which provides all grades of society in our land; that morbid appetite for external show among our men and women, which resists with demonic force, alike the precepts of morality, the restraints of insolvency, and the more dark and tangible barrier of grim poverty itself.

It is said that in England among the genteel classes of community, economy in dress and living is made a matter of boast, while the family that should indulge in fashionable show beyond its pecuniary ability, is held up to universal ridicule. For be it from us to wish to impose restraint upon society in these United States, inconsistent with our foreign trade, or our great national progress in refined civilization. But we can see no more danger to these interests in thus curtailing the excessive importation of foreign fabrics, than is now produced by the temperance reform in the diminution of our imports of wine and brandy.

In the beginning Jesus taught of the beauty of simplicity, and in his perfect life he gave example of its truth. St. Paul preached it and his epistles enjoin it with eloquent and earnest allusion; the early Christians followed the precepts and example of their master, some of them it is true, in over zeal, carried the point a little too far; 'tis said that Chrysostom rebuked the "eaters grey," for the too nice fitting of their simple attire. At the court of Louis 14th, the Arch bishop denounced from the altar, the meretricious taste of the females of the court. But in our republican land in these last days of light and protestant reform, fashion and extravagance is ten fold more universally than in any other part of the civilized Christian world. It is a gangrene on our social system, which promises, if not restrained, to uproot morality, and bring all our boasted professions of religion to shame.

We have read of savages so addicted to gambling that when they had lost all, they set up their own children! We have not done this great sin; but we have sold our *littlings* for dust! our *State Stock* are pledged for the payment of debts based on foreign finery, and children yet unborn must redeem them!

Waterloo, Dec. 15, 1841. S. W.

Mr. Editor.—The following memoranda contain so much good sense, given in a plain, familiar manner that I believe you will think them worthy of a place in your columns. They are extracts from letters of a practical man to a novice in the business of farming yet may perhaps give instruction to some "old hand at the plough."

Sheep.
I consider them the most pleasant as well as profitable branch of farming—indeed there is no doubt

it. The experiments I made were under disadvantageous circumstances, convinced me perfectly. I think I have heard you say there are some on the farm now, look well to them this winter, and you will be convinced of the justice of my remarks before many months. You will find that your flock is doubled (with proper care and attention) every year—that the manure will pay all the trouble and what it takes in the way of fodder to support them. In the summer they will live where nothing else can, and improve, or rather give barren fields more than they take off, and the wool, in consequence, will be clear profit—thus:—

100 sheep cost, say \$3 per head,	\$300
100 lambs worth to you \$3 per head,	300
3 pounds wool each, 300 lbs. at 35c,	105
	DR.
	\$300
	CR.

One of the principal maxims as regards these, as well as cattle, is to have them well attended to in winter. Economy, to say nothing of humanity, requires it—it is neglected at this time they get out of condition, and it will take half the summer to restore them to good order, and all the time they are recovering, they are not profitable—hence the economy—for just so much time is lost. The best plan to winter cattle, is to get them into as good condition as possible in the fall—when it costs comparatively little, for the grass is then the strongest—keep them up in condition during the winter, and they enter spring profitable at once, without loss of time or provender.

Turnips, Ruta Baga and Beets.

You will have to be careful to raise a crop of turnips, for the fly is very severe on them when young. Fine lime dusted over them is a great protection.—For winter use I would not advise you to depend on them, as they do not keep good longer than Christmas; after that they get watery and hollow. Ruta Baga is much better, and are sound and good the whole season. For cattle they are not so much liked as beets, and are not near as profitable. I would advise you, by all means, to pay every attention to the latter—where there were potatoes last year, particularly if it was well manured, is the very ground for them. Have it well prepared—ploughed deep and well, to make it fine—cultivate with the plough, keep the weeds out, and you will be astonished at the result. These, cabbage, ruta baga, and indeed almost every vegetable can be cultivated with the plough, not only as well, but better than with the hoe, and at a great saving of expense.

Manuring Gardens.

If your garden has been manured regularly with stable manure, as I suppose it has, you will find a great advantage in trying lime and ashes—the latter from the ley tub are very good—and all the stable manure you will want in the fall for the garden, should now (April) be hauled into a dung pile; you will find it when wanted, rich and mellow.

Farming Generally.

The grand secret in farming, I am well satisfied, is to be early in planting and having your ground in good order—well ploughed and harrowed.

Get your oats in as soon as the ground is fit for ploughing—be sure to roll them when about two or three inches high, and do it well, just before a shower if possible.

Finish planting your corn one day before any of your neighbors, and if your lands or help are wet by rain in covering the last hill, so much the better. Keep working at it until it is above knee high, and you will have no further trouble, except, perhaps, to enlarge your crib.

IMPORTANT DISCOVERY.

MESSRS. EDITORS:—Some time since, you published an article from a French paper, on the subject or process of self-manuring land, for growing wheat. En-

closed, you have another article from the same source on the self-manuring process for the Grape. This experiment too has been tried, with complete success, on the continent of Europe. They are spoken of not as experiments, but as practical results. And if there is any reliance to be placed on them, they are invaluable, and well worth the attention of all, especially so, to our agriculturists. You will confer a favor on the writer, and no doubt on all your readers, by giving the enclosed as wide a circulation as possible. And let all who have an opportunity use themselves of an experiment so cheap, and if found successful, so beneficial, that is to produce an entire revolution in agriculture throughout the world. Nature speaks volumes for it, and the ease and happiness of the human race, invite all who have an opportunity, to test it. W.

Discoveries in Agriculture.

A few months since we extracted from a Paris paper, the *Revue*, a statement to the effect that the straw of wheat, scattered over a field in which wheat is sown, makes the best manure that can be procured. The same paper furnishes us with what it considers a parallel case, in the mode adopted by certain vine dressers of France, who cut off the leaves and twigs of the vine, and mingle them with the earth about its roots; and in that way it is said, produce the most hardy prolix vines that are known. He quotes from the "Organic Chemistry" of Doct. Liebig, one of the most distinguished philosophers of Europe, the following remarks in relation to the subject:

The observations contained in the following pages should be extensively known, because they furnish a remarkable proof of the principles which have been stated in the preceding part of the work, both as to the manner in which manure acts, and on the origin of the carbon and nitrogen of plants.

They prove that a vineyard may be retained in fertility without the application of animal manure, when the leaves and branches pruned from the vines are cut into small pieces and used as a manure.

According to the first of the following statements, both of which merit complete confidence, the perfect fruitfulness of a vineyard has been maintained in this manner for eight years, and according to the latter statement, for ten years.

Now, during this long period, no carbon was conveyed to the soil, for that contained in the pruned branches was the produce of the plant itself, so that the vines were placed exactly in the same condition as in a forest which receive no manure. Under ordinary circumstances, a manure containing potash must be used, otherwise the fertility of the soil will decrease. This is done in all wine countries; so that alkalies to a very considerable amount must be extracted from the soil.

When, however, the method of manuring, now to be described is adopted, the quantity of alkalies exported in the wine does not exceed that which the progressive disintegration of the soil every year renders capable of being absorbed by the plants.

[The author then proceeds to scientific calculations, which will not interest the general reader. After these we have the two cases alluded to, taken from an article by M. Krebs, of Soeheim, in a German periodical of July, 1840:—]

In reference to an article in your paper, No. 7, 1835, and No. 29, 1839, I cannot omit the opportunity of again calling the public attention to the fact, that nothing more is necessary for the manure of a vineyard, than the branches which are cut from the vines themselves.

"My vineyard has been manured in this way for eight years, without receiving any other kind of manure, and yet more beautiful and richly laden vines could scarcely be pointed out. I formerly followed the method usually practised in this district, and was obliged in consequence to purchase manure to a large amount. This is now entirely saved, and my land is in excellent condition.

"When I see the fatiguing labor used in the manuring vineyards, horses and men toiling up the mountains with unnecessary materials—I feel inclined to say, all, come to my vineyard and see how a better method has been discovered. I have provided that vines shall manure themselves like trees of the forest, and even better than they! The foliage falls from trees in a forest only when it is withered, and it lies for years before it decays; but the branches are pruned from the vine in the end of July, or the beginning of August, whilst still fresh and moist. If they are then cut into small pieces and mixed with the earth, they undergo putrefaction so completely, that, as I have learned by

experience, at the end of four weeks not the smallest trace of them can be found."

The following remarks are by the editor of the periodical. We find the following notices of the same fact in Henderson's "History of Wines of the Old and New World:—"

"The best manure for vines is the branches pruned from the vines themselves, cut into small pieces, and immediately mixed with the soil.

"These branches were used as manure long since in the Bergstrasse," M. Fournelle then says:

"I remember that twenty years ago, a man called Peter Muller, had a vineyard, in which he manured with the branches pruned from the vines, and continued this practice for thirty years. His way of applying them was to hoe them into the soil, after having cut them into small pieces.

"His vineyard was always in a thriving condition; so much so, indeed, that the peasants here speak of it to this day, wondering that old Muller had so good a vineyard, and yet used no manure."

Lastly, Wilhelm Rul, of Schriesheim, writes:

"For the last ten years I have been unable to place dung on my vineyard, because I am poor and can buy none. But I was very unwilling to allow my vines to decay, as they were my only source of support in my old age; and I often walked very anxiously amongst them without knowing what I should do. At last my necessities became greater, which made me more attentive, so that I remarked that the grass was longer in some spots where the branches of the vine fell, than in those where there were none: so I thought upon the matter, and then said to myself—If these branches can make the grass strong and green, they must also be able to make my plants grow better, and become strong and green." I dug, therefore, my vineyard as deep as I could put dung into it, and cut the branches into pieces, placing them in the holes and covering them with earth. In a year I had the very great satisfaction to see my barren vineyard become quite beautiful. This plan I continued every year, and now my vines grow splendidly, and remain the whole summer green, even in the greatest heat.

"All my neighbors wonder very much how my vineyard is so rich, and that I obtain so many grapes from it, and yet they all know that I have put no dung upon it for ten years."

Here is the experience of thirty years, and yet it is confined only to a few sensible individuals, who have the resolution to imitate upon the wisdom of their ancestors, as nature age innovates upon the wisdom of infancy. The husbandman is not a docile animal; he is of Chinese extraction, and adheres to the "good old beaten track" of carelessness and sloth, in defiance of all the elements and laws of nature. The great founder of Chinese medicine, Shin-nung, lived before the flood, and none of his followers have ever excelled him.

Nobody dare improve on such a venerable system; to cure a man upon another principle would, no doubt, cause wonder among the natives, but they would never think of adopting the new system. The good old ways are established creeds all over the world.

"New Discovery in Agriculture."

Respecting the article which we published under this heading in our Nov. No., we find the following remarks in the N. Y. Tribune.

I observe in the Tribune of the 22d ult., an article from a Paris paper, entitled "An important discovery in Agriculture." It is a discovery in France, the fact is remarkable; as it is, and always has been, a well known fact among our farmers, that the leaves of trees, and perishing vegetables on land constitute the manure which the laws of nature have provided for sustaining fertility. So true is this, that when I was a boy and a young man, before the revolution, (for I was bred a farmer,) it was customary for farmers to let their land lie untilled for one, or more years, for the purpose of being enriched by the growth of grass and weeds. This was the great defect in farming; the cultivators relying wholly on this natural manure, without any rotation of crops. Before the Revolution I never knew an instance, in my native village, of an attempt to fertilize land by green crops or rotation.

At this day, there are districts of land, within my observation, which are, year after year, sowed with rye, without any manure, except the stubble of the former crop. In many places, this stubble is sufficient to keep the land in good heart for rye, for any period at pleasure.

The experiments, stated in the article above named, are not in exact accordance with the practice of our

farmers, but all dependant on the same principle.

I have never seen an experiment made by placing grain under straw upon glass; but it is not an uncommo practice for farmers to spread straw upon grass-land for manure.

Whether straw upon the surface will produce more effect than when covered with earth, is a practical question; but I see farmers covering the seed of potatoes with straw, and plowing it in with a shallow furrow-slice.

N. WEBSTER.
[*Ur*] We too were "ired in the Country," and have some knowledge of farming. We were rather favorably struck with the "discovery in agriculture," to which our learned correspondent alludes, and are also inclined somewhat to his opinion that the principle is not *entirely new*. We think we can give a stronger instance of its practical utility than either the French writer or our correspondent, but we only vouch for its truth so far as having heard it when a boy from the lips of a respectable farmer who resided on the banks of the Susquehanna. The statement was this: A portion of his farm was *bare* *clack*, which, in view of the small amount of labor bestowed upon it, he made the most productive. In the spring of the year he had down or planted his potatoes on the rock, and covering them over with straw, paid no more attention to them until fall, when he merely raked off the dry straw and exposed a most abundant crop of the finest quality! The advantages of this method of raising potatoes are:

1. No ploughing.
2. No hoeing.
3. No digging—the rake only being required.
4. They are perfectly dry.
5. They are perfectly clean.—ED. THURNEY.

A Good Thing for Farmers.

There is no one thing, it is believed, that would increase the profits of farming more, and better enable farmers to know what they are about, than the most rigid accuracy in experiments. Here is the great defect in agriculture in Western New York, and doubtless elsewhere too—guessing and estimating, but not actually measuring.

For instance, a farmer believes he has found a very much improved mode of fattening cattle—he feels them so and so—and with this and that; but how does he know how much better his way is than other peoples; and how can he satisfy others that his mode is best, and induce them to adopt it?

How can he? Why let him forthwith procure a weighing machine, such as we use for weighing hay—costing fifty dollars perhaps—a large sum for most farmers; and let him perform all his experiments, by measuring his feed, and at the end of every week accurately weighing each of his cattle, and observing what kind and mode of feeding increases their weight most rapidly. From such experiments, he will soon be enabled to calculate his profit and loss to a dollar. Let him pursue the same course with his hogs, and other animals, at the same time that he endeavors, by reading and inquiry, to learn the best on the subject, and before many years he will have a fund of facts, (and of money too, I trust) of more value, three fold, than the cost of his scales. Who will be the first to do this? Who? [I give you a reply.]

Again—there are many new, and very valuable things, lately discovered in raising crops. It has been found by fair experiment, for instance, that *hwe* on land greatly benefits it—that *much* *much* is of great value for some crops—that *subsoil* *ploughing* will double, perhaps the products of the soil—that certain modes of culture without additional cost, or certain varieties of seed with little additional care, will add bushels to every acre. But who knows the precise amount of profit—if after all these are any profit at all, except under favorable circumstances—if the thing is done only by guessing? A merchant or a banker would find it rather dull business, if, instead of keeping every thing square and accurate, he should set about *guessing* his profit and loss! No wonder then, that farmers sometimes feel a little dull and heartless.

Well—how is this difficulty demolished? Why, you have only to get a *tape-line*, costing about one

dollar,—and measure all your fields—and any farmer who has studied arithmetic, and who has no more than 250 acres, can do this in half a day or a day. Then, count your loads of manure—register the quantity of seed, and every particular in sowing it—and measure, not guess at, the crop which comes from the land. All this on a farm of common size, would not cost in additional time, more than ten dollars; and how much think you, would it be worth? As much as ten dollars! How much would it be worth to each farmer of you, who cultivates fifty acres every year, to know, for a certainty, the way in which he could increase the best products of every acre to the amount of one dollar a year?

And how much value would it be to Western New York, in ten years, if every intelligent farmer would now get a *weighing machine*, and a *tape-line*, and keep accurate accounts, and at the same time inform himself through the New Genesee Farmer of all the best modes of fattening animals, and of raising crops, and of the best seeds, and of the best ploughs, and other implements, and should practise *exactly*, systematically, mathematically, upon the information?

J. J. T.

Treasury Report.—a tariff to protection cannot favor a sound currency, and a free trade cannot encourage an increase of manufacturing industry in the worst of times.

In the late report of the Secretary of the Treasury we find an ingenious argument in favor of increased protection to our home manufacturers: we should have been better pleased to see from the same master pen, an apology for that moderate protection which our present tariff for revenue incidentally gives our home industry.

In times like the present when the whole nation is prostrated by that reaction which has succeeded inflation; we cannot but expect from the fathers of the nation, such councils as will tend to turn the people back to retrenchment and reform, industry and economy, instead of encouraging the delusive hope, that an increased tariff on foreign fabrics will bring back high prices and a prosperous trade to the country.

The Secretary says that "nothing is better established by our experience and the experience of other nations, than that the augmentation of duties, does not augment in an equal degree the cost of the article to the consumer; in many cases it appears not to increase that cost at all, very often the price to the consumer is kept down notwithstanding the increased duties." We would ask then how is our manufacture to be protected by an increased duty? But we apprehend that this part of the Secretary's argument applies only to the ultimate consequences of protection; inflation and high prices are the first fruits, and the only ones coveted by the manufacturer; competition, over production, low prices and bankruptcy follow. The high tariff of 1823 ruined half the manufacturers in New England by the competition it induced, and the only argument we now know of in favor of high protection, is that we should create an evil that good may grow out of it. During the palmy days of Bank making, when money became scarce, new Bank Characters were applied for in order to supply the deficiency; but now when a reaction has deranged the currency, we seek to increase the tariff in order to make up for the fluctuating vicious state of the currency, and our consequent losses by bad debts.

Ask an intelligent manufacturer which he had rather have, all the States south and west, sound and punctual customers, or an increase of 50 per cent in the tariff of duty on foreign fabrics, and what will be his answer, "a nimble penny is better than the slow and doubtful shilling." It is

true that we have bought too much from abroad, because we have bought more than we have sold; but if on present tariff will not prevent this, how can we hope a higher one to do it? If the increased duty raises the price in our market, the foreign producer can still compete with us, as the increased prices will offset the increased duty, and when the price falls our manufacturers will be no better off than they are now.

A member of Congress (Mr. Marshall) in advocating protection, says, "our manufacturers must be guarded and fondled in the first days of their childhood," very true, but the over zealous friends of protection would destroy the health of the child, by feeding it strong meat and stimulating drinks, instead of the more simple aliment suited to its tender age. Under the protection which our revenue bill incidentally gives to our various manufactures, they have been continually on the increase. Our cotton goods are now exported in large quantities, which could not be done if they depended on a tariff to protect them. We know of no one branch of industry which suffers from foreign competition at this time, unless it may be Iron; and as Government has for some years back admitted rail-road iron free of duty, it would now be no more than a just retribution to our Iron manufacturers, to establish the duty, as sundry memorialists have petitioned, at the rate charged by the compromise act in the year 1829.

Much is said and written of late, about foreign restriction on our bread-stuffs, still we find that last year England admitted our bread stuffs under the lowest grade of duty to the amount of six millions of dollars; through the Canadas much of our flour and provisions finds a foreign market at a low rate of duty. If England admitted our bread stuffs free at all times, it would only lower the price of her own corn, without materially increasing the demand for ours; we should also have to compete with Europe for the English market, and Russia and Poland can raise grain cheaper than we can, because their labor is cheaper. But if we had the exclusive privilege of supplying England with all the foreign corn she needs, it would in ordinary years be very little; New England alone consumes more of the production of the West in one year, than is exported to all parts of the world in several years; and this market, based on the rapid progress of manufacturing industry, under the healthy protection which is given by the provision of the compromise law, will be found continually increasing, even in times like the present, when a general bankruptcy threatens the more agricultural portions of the country. If the agricultural states had not involved themselves in debt, our manufacturing states would be in a very prosperous condition at this time.

S. W.

W'atolou, Nov. 28, 1811.

Smutty Wheat in Old Genesee.

MR. GENESEE FARMER—

If worthy of a place in your valuable and extensively read paper, and if, in your opinion, beneficial to the farmers of Western New York, I should like you to hand round to them through your columns, these few remarks in relation to that great evil,—Smut in wheat.

Your readers in New England and elsewhere, will probably many of them, on casting their eyes upon the caption of this communication, exclaim with surprise,—What, smutty wheat in old Genesee? That garden of the Empire State! Can it be, that the wealthy, the intelligent, the enterprising, the successful farmers of that favored region allow their princely fields, their excellent soil to produce this detestable fungi? Yes, Mr. Editor, and however it may reflect on our character abroad as wheat growers, the fact cannot be denied, that

to a considerable extent it is but too true. And it seems to me that so one portion of your columns should occasionally speak out against this great evil.

The origin of this disease, I believe, may be dated as far back as the cultivation of the grain itself; and from that day to the present, numberless experiments have been made by agriculturists of the old world, as well as by those of our own country, to ascertain the cause; and yet up to the present time, the conclusions which have been arrived at, are not entirely satisfactory. One of these experiments ascribes it to too much moisture in the soil, or a too humid atmosphere at a particular stage in the growth of the grain. Another was of opinion that it was caused by an insect. Another that it was a fungus, and that the powder which is similar to that of the common puff-ball of our fields, was the infecting agent. Another is of opinion that the minute grains of smut are in fact insects, and that when they come in contact with the sound seed wheat, they adhere to it, and inoculate it in such a manner as to cause it to produce smut. Another opinion, and which is now generally admitted to be a true one, is that it is a small parasitic fungus, which being absorbed by the roots of the seed grain while in a state of germination, and being thence carried by the sap to the young germ, multiplying rapidly and continues to grow in like manner as the sound grain, which at maturity it much resembles.

But let us turn from the cause to the cure, or rather preventive, which is of far more consequence to the farmers, and this is what you should urge upon the notice of your readers, as of paramount importance to them in more ways than one. They need not expend their time nor their money in making experiments. These have already been made in numerous instances, and in every variety of form, by some of the most scientific agriculturists the world has yet seen; and the result is, a most complete and effective remedy, and one which comes within the reach of every farmer, viz:—To soak the seed in strong brine and then stir into it fresh slaked lime until every kernel is coated. In no single instance within my knowledge, has this failed when properly applied; indeed so perfect a cure is it, that in some sections of Western New York, where formerly the wheat crops were greatly injured, if not entirely ruined by smut, a proper application of this remedy, and an annual continuance of it for a series of years, has totally eradicated the evil; so much so that brining and liming is now considered unnecessary.

Great quantities of smut have been harvested in our town the present season, more than for several years previous. Some farmers of my acquaintance have had such an abundant crop of it, that it was with much difficulty the hands could attend the machine during the operation of threshing, so dense and suffocating was the cloud of smut-dust which constantly encircled them. To these farmers, and all others who are troubled with smut in their wheat, I would recommend a thorough application of brine and lime without farther delay.

Castle, Wyoming Co., N. Y.

Progress of Horticulture—Exhibitions, &c.

In the last number of the Farmer, we very briefly noticed the more interesting portions of the Massachusetts Horticultural Society's report; we now extract from the Magazine of Horticulture, the following items of intelligence from the published reports of other similar institutions. We agree fully and with much pleasure in the remark of the Editor of the Magazine, that these reports bear sufficient evidence that a taste for fruit and flowers is becoming general and is attracting public attention.

Essex Co. Natural History Society.—"During the present season, the Horticultural exhibitions at the Society's hall have gone off with great eclat.

The variety of fruits and flowers was not only greater than at prior seasons, but the number of contributors has very much increased. Several new amateurs have entered the field, and are bestowing great attention to the cultivation of flowers, particularly of the dahlia, or to the growth of choice and delicious fruits.

"Ten weekly exhibitions have been held on Wednesday of the respective weeks, and the annual on Tuesday and Wednesday, September 11th and 13th. The hall was also opened on the evening of the 11th of July, for a display of two of those favorite flowers of midnight, silence, and darkness, "the night-blooming cereus," from the green-house of Mr. F. Putnam. About eight hundred species and varieties of plants have been exhibited in flower; one hundred and fifty were natives of our woods and meadows—the others the product of the green-house and of the garden. Of these last, one hundred and twenty were roses, one hundred and twenty dahlias, sixty geraniums, &c. Of two hundred and thirty-three varieties of fruit, one hundred and twenty-two were pears, twenty-eight apples."

American Institute, New York.—At the fair of this Institution last October, the exhibition of fruit, vegetables and flowers, was excellent.

Exhibition of the Burlington (N. Y.) Lyceum.—The labors of this institution to spread a taste for gardening, have not been in vain. The reporter says: "The fruits exhibited were remarkably fine, and the specimens numerous. The vegetables were greatly increased in number and variety, compared with former exhibitions."

The collection of hot-house and green-house plants, pyramids and bouquets of flowers was very creditable.

Louisville (Ky.) and Jefferson Co. Horticultural Society.—The exhibition of this society in September last, being its first, shows that there is a lively spirit of improvement going on in that region. The report enumerates a much greater variety of fruit and flowers than might be expected in that quarter.

Pennsylvania Horticultural Society, (Phil'd.)—In concluding a long and interesting report of the Fall exhibition of this Society, the committee make the following remarks: "The onward march of horticulture in this community was strikingly manifest at the present exhibition; the great improvement in all the departments of that science was evinced in the increased variety of exotic plants, the successful culture of the rarer and finer fruits, and the remarkable progress in the growth of culinary vegetables. Nor was the growing interest which our citizens generally feel in the subject, less apparent or less gratifying on the occasion, for at no former period have the rooms been more thronged with visitors, or more animated by a delighted and refined public."

These items are such as every farmer should peruse with interest, and be stimulated by them to devote that attention to the production of fruit and vegetables particularly, as their importance in domestic and rural economy would plainly suggest. It is not our wish to infringe on the Agricultural character of the Farmer with such notices as will merely interest the scientific Horticulturist, and which would be neither read nor cared for by the great mass of its readers, but we think it the duty of every Agricultural Journal to keep regularly before its readers the progressive course of those branches of Horticulture, to which every well-wisher of his country should wish public attention might be effectually and generally directed. Example is very powerful, and wherever examples

are afforded as of our brethren in various parts of the country uniting their efforts to promote the advancement of Horticulture, to increase in quantity and quality the products of the soil, thereby aiding onward the great cause of human improvement and human happiness, and when those noble efforts are successful, as they generally are if properly directed, we consider that they should at least receive a brief notice in every journal devoted to the interests of the cultivator.

It must be through the influence of Agricultural Journals, that any thing like the general attention of community can be directed to the advantages to be derived from the practice of Horticulture, and they must be the principal channels through which that knowledge must be conveyed so essential to its progress. The circulation of books or periodicals exclusively Horticultural, is exceedingly limited in any part of this country, in the West particularly, nor can they be made to circulate until both taste and skill have been disseminated; to do this, we would repeat, must be the work of Agricultural Periodicals, and it is pleasing to see that some of the leading journals have already expressed their intention of giving the subject the attention it merits, or at least more than heretofore, during the ensuing year. We hope that all will consider the propriety of doing so and do it. P.

Scarlet Fever.

A correspondent says, "The happiest effects have resulted from washing the patient in weak lye which feels a little slippery to the fingers. It is best to begin in time, when the fever or redness first appears; and with a cloth or sponge apply it all over the child every few hours. But if the fever has got up, it should be repeated every five minutes till the heat abates. One of our children was getting better under this treatment; but his nurse observed in the night, he was again very hot, she washed him all over, and in a few minutes every trace of fever had left him. He felt cool, slept comfortably till morning, and has had no return of it since. Even bathing the feet in weak lye has a very soothing effect."

"Bleeding and strong emetics are bad—nauseating doses of ipecac good. If the throat is swollen, apply sweet oil, or a liniment made of this and aqua ammonia, and drink freely of slippery elm, catnip, or sage tea."

"If the swelling is very bad, it is best to eel in the doctor—or blister, and apply a bag of hops dipped in warm vinegar round the neck from ear to ear, the sufferer breathing the fumes of the vinegar. Gargling a strong infusion of Seneca snake root or Cayenne pepper will do for large children or grown persons; and afterwards use vinegar of squills. Give a dose of calomel when the skin begins to peel off; and be very careful for many days after, not to take cold."

"The country is full of resources, and the people full of energy, and the great and permanent remedy for present embarrassments must be sought in industry, economy, the observance of good faith, and the favorable influence of time."—Tyler's Message.

A BOTTLE OF PORT WINE, of New York manufacture, has been found to contain 3 ounces of alcohol, 4 of cider, 1½ of sugar, 2 of alum, 1 of tartaric acid, and 4 of concentrated solution of logwood.

New doctrines never please the old. They like to fancy that the world has been losing wisdom instead of gaining it, since they were young.

Love labor; for if you do not want it for food you may for physic. It is wholesome for the body and mind.

Learning is obtained only by labor; it cannot be bought with money; otherwise the rich would uniformly be intelligent. Learning regards all men as equal, and bestows her treasures on those only who work for them.

Let him who regrets the loss of time make a proper use of that which is to come.

Improvements in feeding Silk Worms.

The following article, which we copy from an Ohio paper at the request of the author, contains some suggestions on the subject of Silk culture, which may be of service to some of our readers; but we cannot conceive what new invention or discovery Mr. Tillingham claims the right to have secured to him by a patent, nor can we commend the spirit which prompts him to make the attempt. If we were engaged in that business, and desired to feed silk worms according to the plan he describes, we fancy we should do so in spite of any patent he may obtain.—The paper from which we copy, contains several certificates signed by persons who have witnessed Mr. T.'s operations, corroborating his statements and testifying of the complete success of his plans. B.

The Silk Business.

We last week visited the Cocoonery and Silk Establishment of Mr. Joseph B. Tillingham, in this village, and were politely conducted through the different apartments, from the room occupied in the hatching and feeding of the worms to that used for reeling and spinning silk,—and were much gratified to learn that Mr. T. is in a fair way to make the business profitable to him, as well as a neighbor to our village. We were shown some specimens of raw silk, and a few skeins of sewing silk, manufactured at Mr. T.'s establishment, which will bear honorable comparison with the best Italian.

We publish here an article from Mr. Tillingham, giving a history of his method of feeding the worm and reeling silk, which, no doubt, will be interesting to silk growers generally.

Thus may certify, that four years has passed since I first commenced feeding the silk worm, and have annually increased my stock of trees to half a million. Notwithstanding my success the past seasons, I have exceeded my expectations in this new branch of business, and the present season, I have found some trouble and difficulty and much anxiety in the last stage of the worm before spinning, which has led me to adopt a new mode of feeding.

In the first place, in the old way of feeding a large crop of worms, directly after the fourth moulting, so much food is necessary, that much water and confusion is unavoidable. And in the second place, much labor is required in frequent changing, in order to keep them clean and healthy. And, thirdly, the difficulty of preparing, in proper season, suitable fixtures for making their cocoons agreeable to the natural instinct of their species. In taking all these difficulties into consideration, I finally came to this forcible conclusion;—unless some material change should take place in the management of the worm, in the manner of feeding, &c., this important branch of industry could not well be carried on to much advantage in this country; therefore I ventured the following experiment.

I fed my worms as formerly in my nursery room, as we call it, about 20 by 40 feet, upon thin board shelves, two or half feet by four, until they arrive from the fourth moulting; at which time they are removed upon these shelves into the cocoon room with the litter that has accumulated since the third moulting. The said cocoon room is constructed long and narrow, 140 feet long and 18 wide, and as low as will admit of convenience. The frame of this building consists only of bevel posts and rafters, six by eight feet apart. The posts are well set in the ground, and the common earth constitutes the floor. The feeding frame is four feet wide, to admit the feeding sheet the longest way, and extends the whole length of the room, except between the doors for coming in and going out. This room is intended to feed, by cutting whole trees, from one to six feet in length, by laying them upon the worms with their foliage. The feeding frame is suspended from the rafters about three feet from the ground, and one tier of frames on each side, two feet from the wall, which leaves six feet alley through the middle, sufficient for a hand cart to pass with foliage. Two tier of side boards, hung with leather hinges the whole length of both sides, constitute both doors and walls, and admit of both light and air; the lower one is hung close to the ground and opened for the passage of the litter, which is very soon removed with a hoe or rake. The feeding frame is made of sawed split, one and half inches by three, and moveable staves of about one inch square, placed at suitable distances to support the trees and worms as they rise from the shelf below, which is supported by buttresses; as soon as the worms leave the shelf, it is let down to the ground with the litter. The worms are left with a

free circulation of air, and their excrement falls away from them to the ground. The trees are raised at which had on, which makes a most suitable place for their working, and remarkable for their being borne single, and less loss than any other frame I ever saw.

Actual experience has demonstrated the present season, that two hundred worms can be well fed upon every square foot of this frame, and if the whole should be filled at once we should have 200,000 to finish their work every two weeks, and the whole feeding and attendance may be conveniently done without hurry or any difficulty with the help of two men and two boys, ten years old, to pick leaves, gather cocoons, &c.

I believe it to be a safe and prudent calculation, from what we have done and are now doing, with the help we now have, that in three months time 1,000,000 of worms may be well carried through. As we have had worms hatching about every day since we commenced the present season, and consequently some winding continually, we are quite certain of success with every brood we hatch, if we know our eggs to be from a healthy stock and in a good condition.—This is all important to every silk grower. We are daily witnessing the great contrast. Eggs from selected cocoons of our own raising have done remarkably well through the season, from hatching and winding, and those we obtained, that were not selected, more or less died in the periods of moulting, and some would die just before winding.

We have good reason to believe, that the principal cause of many failures may be attributed to the care of selecting or manner of preserving. We are now selecting our best cocoons for our own stock of eggs for the next season, and contemplate to feed 2,000,000 from the same series of trees.

From the commencement, I have calculated to reel our own cocoons as soon as practicable for the manufacturers.

In visiting reeling establishments, where water is heated by steam, I thought I observed the difficulty about it, by heating a chamber of iron pipes, I am enabled to try another operation, by making a wooden box of 2 inch plank, 10 feet by 10 feet, by making use of sheet iron for the bottom. Said box is 1 feet long, 2 feet wide, and 1 foot deep. This constitutes the boiler, set on a brick arch, with a flue connected with the flue of the chimney. My small fixture consists of three of the Piedmontese Reels and one spinning machine of three spindles each, with the boiler and apparatus for heating water in the reeling pans, are all situated in a common dwelling room of 16 feet square. I have a wooden trough, made of 2 inch plank, 2 feet long, 16 inches wide, and 10 inches deep, raised 2 feet from the floor, in pans with partitions fitted to the inside of the trough, of convenient length for each reeler. A two inch tin pipe is started from the top of the boiler through the plank and is carried over the top to the bottom of the trough, runs 12 feet to the length, under the pans, and discharges through the ceiling outside; also, another pipe for letting off the water from the trough.

The same water may be used several days without changing; and in about one hour from the time the fire is started under the boiler, the water is heated by steam the right temperature for commencing feeding, and continues to keep its temperature with very little tendency. It answers the purpose intended admirably. In five weeks from the time the eggs are hatched, the silk is reeled into raw sewing, and not much inferior to the best Italian. We expect the foregoing improvements will soon be patented.

We are very much gratified with the token of approbation received from our numerous visitors, and yet would be pleased to wait on all as far as our time will allow, and spare no pains to impart information in this business, as far as we find ourselves in possession.

J. B. TILLINGHAM.

N. Walcott, Aug. 15, 1841.

All communications by mail, for information may be put paid.

J. B. T.

Silk Culture.

Reasons why the people of the United States, especially the farmers, should engage in the business of silk growing.

1st. Because silk forms the heaviest item in the catalogue of our importations.

2d. Because we possess the means of doing it to better advantage than any other nation.

3d. Because the necessary skill is easily acquired and no nation ever possessed better talents to acquire it.

4th. Because the nation is under heavy embarrassments on account of excessive importations, and no

other means are so sure of success in providing the necessary relief.

5th. Because it can be effectually engaged in by all classes of people, requiring little or no capital.

6th. Because we have more spare land than any other nation, and much well suited to the growth of the mulberry, which is worn out for other purposes.

7th. Because we are already well stocked with the mulberry trees, which will be lost to the nation if not used for that purpose.

8th. Because a stock of silk worms may be obtained the first year, equal to what could be raised of any other live stock in a great portion of a life time.

9th. Because raw silk or cocoons are always surer of sale than almost any other commodity.

10th. Because it is a very certain crop.

11th. Because a pound of silk worth six dollars can be grown in less time than a pound of wool worth fifty cents.

12th. Because it will cost no more to transport a pound of silk to market worth six dollars than a pound of bread stuff or pork worth six or eight cents.

13th. Because the labor of growing a crop of silk requires only six or seven weeks, while that of almost any farming crop requires more than six months.

14th. Because most of the labor will be performed by women, children or invalids; who, though willing, are unable to perform other profitable labor.

15th. Because there are hundreds if not thousands of skillful silk manufacturers in the country who are unable to find regular employment for want of raw silk.

16th. Because the growing and manufacturing of silk has never failed to be a source of wealth to any nation which embarked in it.

17th. Because the Legislature of our State, having observed and duly weighed all the foregoing reasons, have wisely offered a liberal bounty for its encouragement.

18th. Because the American Institution, with liberality which speaks volumes to its everlasting credit, has offered, for the encouragement of literature as well as this most eminent branch of industry, a premium of fifty dollars and a gold medal for the best treatise thereunto, and a like medal for the best silk reel. The person who would not be stimulated to exertion by such reasons and liberal offers of reward must be sordid indeed. —N. F. Tribune.

A OF THE NORTH.

From the Western Farmer and Gardener.

On the Different Breeds of Sheep.

[Continued from our October No.]

Continuing the subject of sheep, I will now lay before your readers some account of what we here term the short woolled—that is, the Merino, the Saxon, the Southdown, &c. In as far as I commenced with the long wools, it may be advisable to continue the description, having reference to the length of staple, as some order of rotation is, and consequently of those already named, the Southdown will come last under notice.

The Southdown, Norfolk, Dorset, Ryeland and Cheviot, though, in fact, the old short wools of England, now occupy an intermediate space between the fleeces of Spain, Germany and New Holland, and the long wools of the Cotswold, Leicester and Lincoln. The Southdowns are a long range of hills, diverging from the great chalky stanton which intersects a portion of England from Norfolk to Dorchester, entering the county of Sussex on the west side, and continuing almost in a direct line as far as East Bourne in Pevensay bay, (being within a mile or two of the spot where William the Conqueror landed his army, previous to the battle of Hastings) and occupying a space of more than sixty miles in length with a succession of open downs, and distinguished by their situation and name, from a more northern tract passing through Surrey and Kent and terminating in the Chiltern Downs. One of the downs is a small breed of sheep have been reared for several hundred years, and from their location to they take their name. The present breed of Southdown sheep so justly admired, are indebted particularly to Mr. Elihu, for the possession of the fine form they now invariably carry. We have it upon record, that far from possessing a good shape, they were, originally, long and thin in the neck, high on the shoulders, low behind, high on the loins, down on the rump, the tail set on very low, perpendicular from the hip bones, sharp on the back, the ribs flat, not bowing, narrow in the fore-quarters, but good in the leg, although having big bone. Their improvement has not been by any admixture of foreign blood. The cross with the Leicesters and the Merinos have each proved failures. The same system that Mr. Bake-

all pursued with regard to the improvement of the breeders, was carried out by Mr. Eilman by his exertions on the Southdown with equally satisfactory results. The true principles of breeding were attended to, the sexual intercourse of the sheep regulated by selections, and in and in breeding entirely one away with. Besides improvement in shape, they acquired a better and harder constitution, with a better disposition to fatten, and became much heavier in carcass when fat. They have a patience of occasional short keep, and an endurance of hard service, scarcely surpassed by any other sheep, in early maturity inferior to none, with flesh finely grained, and wool of the most useful quality. The Southdown sheep are polled; the dusky and sometimes black color of the head and legs would almost go to prove that this was their original color, and in almost every pack, notwithstanding the care that is taken to prevent it, several particularized lambs will be dropped, and some entirely black; and there is scarcely a doubt that if left to a wild state, they would in a few years become black altogether. There are no sheep more healthy than the Southdowns. They seldom suffer from the hydrates on the brain, neither are they much subject to the rot. The following is Mr. Eilman's description of his improved Southdowns:

The head small and hornless; legs black and gray, and not too long nor too short; the lip thin, and the space between the nose and the eyes narrow; the under jaw or chop fine and thin; the ears tolerably wide, and well covered with wool, and the forehead also, and the whole space between the ears well protected by it as a defense against the fly; the eye-cap or bone not too projecting, that it may not form a fatal obstacle in lambing; the neck of a medium length, thin towards the head, but enlarging towards the shoulders, where it should be broad and high, and straight in its whole course above and below; the crest should be wide, deep and projecting forward between the fore-legs, indicating a good constitution and a disposition to thrive. Corresponding with this the shoulders should be on a level with the back, and not too wide apart; they should bow outwards from the top of the breast, indicating a springing rib beneath, and leaving room for it. The ribs coming out horizontally from the spine and extending far backward, and the last rib projecting more than the others; the back flat from the shoulders to the setting on of the tail; the loin broad and flat; the rump long and broad, and the tail set on high and nearly on a level with the spine; the hips wide, the space between them, and the last rib on either side as narrow as possible, and the ribs generally presenting a circular form like a barrel; the belly as straight as the back; the legs neither too long nor too short; the fore-legs straight from the breast to the foot, not bending inward at the knee, and standing far apart both before and behind, the hocks having a direction rather outward, and the feet meeting at the thighs behind being particularly full; the bones fine, dry, having no appearance of weakness; and of a speckled or dark color; the belly well defended with wool, and the wool coming down before and behind the knee, and to the back; the wool short, close, curled and fine, and free from spiny projecting fibres. The average dead weight of the Southdown is from 120 to 160 lbs. though they have been fed to weigh 294 lbs.; the fleece, varies from 2½ to 6 lbs., dependant, of course, on circumstances. The wool of the Southdowns, which is most reputed as a carding wool, principally used in making servants' and army clothing in England, and it was sparingly mixed with other wools for finer cloths; with the introduction of the Spanish and German wools it has changed its character, and from being one of the carding wools, has become a good combing one, and enters into the composition of flannels, hosiery and worsted goods of almost every description; heavy cloths for calico printers and paper manufacturers, woollen cordage, and coarse wools, blankets, carpets, dresses, &c., so that although it has lost cast, the most enthusiastic admirers of the old short wools, cannot but look with satisfaction at its extraordinary usefulness.

I have said that the face and legs of the Southdowns are speckled and gray—I wish farmers, however, to understand that it is not every sheep that has face and legs speckled and gray that is a Southdown; and I make this observation, for the purpose of calling attention to the importance of purchasers being particularly tenacious of buying of no persons but of those of established character, and to beware of impostors.

The Cheviot hills are a part of that extensive and elevated range, which extends from Galloway through Northumberland into Cumberland, occupying a space of from 150 to 200 square miles. The majority of

them are pointed like cones; their sides are smooth, and steep, and their bases are nearly in contact with each other. The soil, except on the very top, is fertile, and from the base to the summit of most of them, there is an unbroken and rich greenward. On the upper part of that hill in Northumberland, which is properly named the Cheviot, this most valuable breed of sheep is found, and hence again its name. It is said they have been bred there from time immemorial. A strong prejudice was once time entertained against them, but they are now spreading themselves rapidly over every part of the south of the Islands of Scotland, to the exclusion of the native black faced breed. The head of the Cheviot is polled, bare and clean, with the jaw of good length; the ears not too short; the neck round, not too long, and well covered with wool; the shoulders deep, full and wide set on; the chest full and open; the body, in general, round and full, and hams round and plump; the legs clean, of proportionable length, and well clad with wool to the knee joints and hocks; the fleece fine, close, short and thick set. It possesses very considerable fattening properties, and can endure much hardship, both from starvation and cold. The experiments that have been made in crossing the Cheviot with the Leicester and Southdowns have been entire failures, and in every instance has the original fleece been deteriorated by the system; it is, however, carried on to a considerable extent, and a great portion of the sheep on the Cheviot range, have a considerable quantity of Leicester blood in them, by which the character of the wool is being entirely altered.

EMERA.

From the Philadelphia Evening Post.

Cure for Diseases in Peach Trees.

Gentlemen—As I have understood from a source that cannot be doubted, that there are several persons employed in this State and Pennsylvania, curing diseased Peach Trees and charging for doing so, and as that information has been received directly or indirectly through me without cost to them; I feel it a duty I owe my fellow agriculturists to make it public.

The application to the trees consists of salt and salt petre combined in the proportion of one part of salt petre to eight parts of salt, one half pound of this mixture to a tree seven years old and upward to be applied upon the surface of the ground around and in immediate contact with the trunk of the tree; this will destroy the worm, but to more effectually preserve the tree I also sow this mixture over my orchard at the rate of two bushels to the acre. The size of the fruit is increased, and the flavor very greatly improved, the worm destroyed and the Yellow prevented.

I hope that other papers will place this matter before their readers so as to prevent the public from being imposed upon.

With high respect, I am yours, &c.

LYTTELTON PHYSICK.
Ararat Farm, Cecil county, Md.

Literature as a Source of Happiness.

In treating upon this subject we will take a liberal view of it, and understand, that by the term literature is meant every thing that is committed to letters. Whatever by means of these is taught us, whatever pleases the imagination, cultivates the taste, improves the mind and perfects the character, is to be attributed to literature. To it belongs not more the pretty newspapers of the day, than treatises upon mental philosophy; not more the 'latest novel,' than the fundamental and scientific works of Newton and Franklin. In fine we will take the word in its widest sense, not limiting it, as is frequently done, to works purely scientific.

If we carefully examine the subject, we shall without difficulty discover that literature is truly a source of happiness to us. In the acquisition of knowledge we obtain what is fitted to give us true pleasure at every step. We continually meet with something new, interesting and useful as we advance in our course. Our minds also become improved and strengthened in literary labors. What was once a mystery has now become thoroughly understood. The point, which we once supposed we could not gain, is left far behind. That perfection, to which we once dared not aspire, even in the wildest flights of the imagination, is now a common possession. There is even a pleasure in our toil—it brings its own reward. The store of knowledge, which we are continually adding to what we before possessed, urges us to still greater diligence, gives a laudable zeal in our pursuit, and leads us to the consumption of our hours. How does the inquiring mind rejoice at the development of each truth, that is presented—at each unexpected discovery! What are our sensations as the unbounded fields of science open before us! With clarity we renew our study. It is our joy—our life.

Again, literature is the source of happiness to us on account of rendering to a association with each other more pleasing and profitable. Since our minds are improved by literary exercises, our powers of conversation are increased and improved. And as man is a social being, whatever is added in this way is necessarily added to his happiness. One who is in seclusion is thus brought in contact with the good and great, and has his pleasure increased by associating with them.

It adds to our happiness by enabling us to do good to others. It gives us pleasure in imparting to others the rich treasures that we possess, and which we may impart without injuring ourselves, but on the contrary, rendering our own possessions more sure and fixed. With what interest does the teacher engage in the task of directing the "young idea how to shoot." And this satisfaction arises from the fact, that he knows he is performing a good action, and is benefiting the one that receives it. The writer, who publishes the result of his labor and research, and thus becomes in the highest degree beneficial to man, has his share of enjoyment. The orator stands up before the assembled multitude, points forth the triumphs of his eloquence, reproves, convinces, enlightens and exalts all around; and he too has his reward, the reward that always follows a just act.

Literature renders its possessor happy from the very fact of his possessing such stores of knowledge. It spreads its order before him information of all kinds. Its volumes are ever open before him. Even from fictitious writings he obtains a knowledge of human nature, an insight into character, and the extent and power of the imagination. In the history of the world he has a treasure unsearchable. He almost sees the scenes of the early ages acted over again while he pursues their history. He holds "high converse" with the good in the most ancient times. They speak to him in different languages—in poetry and prose. He is acquainted with every region—at home in every state. He is the keeper of many books, and especially of the "Book of books," "the book of heaven." Every thing is ready for his use; all he uses to do is to open the store-house of his mind, and let it flow forth. He is always ready for action, and able to do good.—*Maine Farmer.*

Agricultural Papers.

The vast improvements in agriculture, which have been made through out the country for some years past, have been brought about in a great measure, by the dissemination of valuable information through agricultural journals. The farmer now finds that he needs a paper devoted to his business, as well as other men. There is no class in whose affairs there are so many subjects presented, on the most of which every one may learn something new from the experience of others. Cultivators now read papers devoted to their interests, not only as a matter of pleasure, but as a matter of profit. They learn the best method of improving soils, of every description. The detailed accounts of reclaiming low lands, and of renovating worn out fields, as pursued with profit. The most successful ways of preparing manures, by which the quantity is greatly augmented, and quality greatly improved.—The most profitable modes of culture, the best productions of every description, &c. &c., and the result of the best practice in every department, is related in a paper to the community, as one neighbor would state his practice to another. This is *book farming*, at which some, even in this day of light, have too prejudice to sneer.—*Far. Jour.*

The Farmers' Cabinet.

We have had occasion, heretofore, to speak in the highest terms of praise of this publication, and especially of its engravings of animals; but we deem it an act of justice now to say, and especially that we appear not invidious towards other agricultural journals, that most of the figures of cattle we have lately seen in that work, are copies from English standard books, especially Youatt's, some of which are given as accurate and apparently original portraits of particular animals recently imported, and in no case we believe is the source acknowledged. Perhaps the Cabinet can explain this.

T

Always think what you say, though you may not always say what you think.

After kindness has failed it is quite reasonable to resort to coercion.

Folly does not always end with youth, nor wisdom begin with old age.

THE NEW GENESSEE FARMER

AND GARDENER'S JOURNAL

BATEHAM & COLMAN,
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For Contents see last page.

PUBLISHERS NOTICE.

Our Success.—The friends of this paper will be gratified to learn that its success thus far this year equals our expectations, notwithstanding the severe embarrassments of the times. Our cash system appears to meet general approbation, and our clerks are kept busily engaged enrolling the names of our old friends (with many new ones) on our new subscription books.

Post Masters are entitled to our warmest thanks for their kindness in franking remittances. The late P. O. circular allows all postmasters to frank letters with remittances from subscribers to publishers of papers, if signed by themselves; so that our friends should write the letters and hand them, with the money, to their postmasters, who will sign and frank them.

Send us Good Money.—We entreat our friends to send us the best money they can obtain. Bills of a number of the Banks in Ohio, Penn. and other States are quite unobtainable, and we daily have to return them from whence they came.

Binding the Volumes.—All subscribers who have a complete set of vol. 1 & 2 should have them bound together. Those who can send them to this office may have it neatly done for 37 1/2 cts. Those who have vol. 2 only should by all means procure vol. 1 so as to preserve the work complete. It will always be worth more than first cost. Vol. 1 & 2 are still furnished at the subscription price—stitched in paper covers—postage the same as on newspapers.

To the Friends of the New Genessee Farmer.

The Editor has the pleasure of announcing to his friends, the Farmers in Western New York, that he is "at home" in Rochester, where it will give him pleasure at all times to see them. His respected correspondent at Wheatland tenders him the hospitality of that region. These, and all other such frank-hearted invitations, he will be most happy to accept at the earliest mutual convenience. He does not intend to stand much upon ceremony. At his period of life there is no time for a long courtship; and the banns having been regularly published, and no one forbidding them, the nuptials may take place at once. Some of the happiest hours of his life have been spent in his intercourse with the farmers at their own hospitable firesides; for no class of men has he more respect than for those in every department of life, who earn their bread by honest and virtuous industry; and for nothing has he labored with more zeal through life than the advancement of the condition of the agricultural classes, the improvement of their art, and the improvement of themselves. In this cause he has had no misgivings, and no regrets excepting regrets that he could do no more; and to this, if so it please God, the remnant of his life will be devoted.

An agricultural paper, of course, comes under the head of book-farming, and has all the prejudices to

encounter which kindle at those words. These prejudices, however, are nearly burnt out, and it is now difficult to find a man who is not ashamed to add fuel to the flame. Those prejudices have not always been without reason; but with no more reason than in respect to all the practical arts of life, book-manufacturing or book-trading. If by book-farming is meant following mere theories, or prescribing rules of practice in the art without any experience, it should have no more weight than the authority of a man who should undertake to manage a vessel in a voyage across the Atlantic without understanding the principles of navigation, or knowing even a rope in the ship. But who pretends to this? No one within our knowledge. Agriculture may be especially termed a science of facts. We go for facts; plain, determined, well authenticated facts; and we go for theories just as far as they are based upon facts, and clearly deducible from them. Types and paper furnish the best record for these facts; the best record, because it is a record open and to remain open to examination; where the facts stated can be reviewed and scrutinized, and all the circumstances connected with them tried. But it would be ridiculous to pretend that there are no settled principles in agriculture; and that after the accumulation of facts for years, we may say centuries, that no principles are determined, and that the first letters of the alphabet in agriculture are yet to be learned. It would be unworthy of us likewise, if we would deserve the character of intelligent and inquisitive men, to rest satisfied with the mere knowledge of facts in any science or art, if we can find out the reasons of those facts. Discussion, therefore, and inquiry, or what some men choose to call mere theorizing, is equally our duty as the ascertaining of facts, if thereby, we can come at a solution of the concealed operations of nature; if it should answer no other purpose, it will at least stimulate and sharpen our powers of observation and inquiry.

Our columns, therefore, will be open to the record of all valuable facts and the intelligent discussion of all important principles in agriculture. We consider some principles as much settled in agriculture as the great truths of the Newtonian philosophy; but we consider nothing as so far settled and beyond all dispute, which any intelligent mind chooses to debate, that all further inquiry must be foreclosed; and in respect to facts, we shall most scrupulously and religiously avoid the statement of any thing as fact, which is not determined in our own minds by the fullest evidence; and whenever the evidence may itself be questionable, we shall honestly submit it to our readers that they may judge for themselves.

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the rows; hoed once and ploughed twice. Expense of raising estimated at 6 cents per bushel. The potatoes worth 15 cts. per bushel for feeding stock.

Greene.—Mr. McGuire's *Potatoes*—6 acres—340 bushels per acre, kind; Round Pinkie, and Flesh Colored—Soil, gravelly loam; previous crops, Wheat, after Meadow; a light dressing of manure to the Wheat, but none to the potatoes; ploughed once in fall and twice in spring—planted 14th & 15th June, with *whole potatoes*, one large one or two small ones in hills—about 3 feet apart each way—hoed once and ploughed once—no further care till harvest.

Greene.—JAMES BEATTY'S *Wheat*—6 Acres—53 29-60 bushels per acre. Soil rich gravelly loam—old Meadow on which cattle had often been foddered in winter—broken up in June—cross ploughed (only once) about the last of Aug.—sowed about 12th Sept. 1 1/2 bushel seed per acre—kind, White Flint.

Wheatland.—GEO. SHEFFER'S *Wheat*—7 1/2 acres—40 bushels per acre—Soil Genesee Plains—after Corn in '39 and Barley in '40—gave 30 loads of manure per acre for barley—ploughed only once after cutting barley, harrowed twice—Sowed Wheat 27th Aug. 1 1/2 bushel per acre—White Flint, rolled after sowing and rolled again 4 weeks after—then fed off close with Sheep—killed well—uninjured by winter.

Castor Bean—Castor Oil Candles

This article of culture is not new to us. We have seen it cultivated in Illinois. It is of easy culture, and has yielded a good profit when grown for medicinal purposes. The use of it referred to in the subjoined articles is new and we shall seek the earliest information in respect to it. In the meantime we request to hear from any of our correspondents, who are acquainted with the facts in the case.

The Alton (Ill.) Telegraph says: "Fifteen thousand dollars and upwards have been paid out at Edwardsville in this country, for castor beans, during the present fall and winter. The market for them is steadily increasing; and it is about as profitable a crop as can be put upon the ground."

CASTOR OIL CANDLES.—We were presented by Mr. E. Marsh, of this city, with one of his candles manufactured from Castor Oil, and were induced to test its quality with a sperm candle. The experiment resulted in the demonstration that the castor oil lasted longer than the sperm candle, and the light of the former was decidedly more brilliant and extensive than that of the latter. We could not discover the least unpleasant smell arising from burning the castor oil candle; and believe that they are well calculated to supersede entirely the use of the sperm candle. Mr. Marsh informs us they could be afforded by the quantity at 25 cents per pound, about one half the cost of sperm candles.

Portraits of Animals.—We intended to have stated last month that Mr. Sherwood had informed us that the portrait of his bull Archer, as given in the Dec. number of this paper, is not correct and does not do the animal justice. Mr. S. has promised to furnish us a correct engraving, and when he does so we will publish it with pleasure.

Mr. Fuller's cow, in the Nov. number, was still worse done; if he will obtain a good drawing we will see that it is correctly engraved and published. There is no draughtsman in this vicinity who has had sufficient experience in the difficult art of taking portraits of living animals.

IMPROVED STOCK.

Ayrshire, Durham and Native.

(From Mr. Colman's Fourth Report on the Agriculture of Massachusetts.)

Dairy Stock.

[Concluded from our last, page 3.]

12. Cows. Enoch Silsby, West Bradford, Mass. "The Durham Short Horns, I think highly of, for the improvement of our country stock, and should prefer half and three quarters blood, to full; they come in as well at two as ours at three years old; feed well on the same food as the natives, and look better in the spring; the pure blood were fair milkers and would hold out till calving, if required; I purchase at different times, ninety-eight selected, country heifers; would keep none if they did not give 7 quarts at night and five in the morning, on a bush of feed, at three years old. Many did it, but would fall off and by November, become dry or nearly so. Out of the said ninety-eight, I kept but two who would give a good measure of milk up to the time of parturition (if wanted). From these and their progeny, I have been most successful in raising, by putting the Durham Short-Horn bull to the cows. The production has been a great improvement on the natives both for milk and appearance, and I have not had a single failure. I feed principally on English hay, occasionally oat and barley straw, and roots, and bring them in at two years old as well as the natives would come it at three. I have never kept a particular account of the quantity and quality of the milk, but I know they are superior to my neighbors'; with good feed, they will give from 16 to 21 or 22 quarts per day; for curd I cannot tell, as I do not make cheese."

B. Shurtleff, of Chelsea, who has for many years kept an extensive milk farm near Boston, and who has had several of these animals of different grades, and had likewise many calves from Bolivar, the bull before referred to, says—"I have no merit as milkers above our common stock." A farmer in one of the best towns in the county, who has been some time engaged in raising this stock, says without hesitation, "he should much prefer our native stock for a dairy." A farmer in Marlborough, who is one of the best managers in the county, and who keeps a dairy of twenty-five cows, will not have a Durham among them; and the farmers in this excellent farming town are agreed in the opinion that a calf of one of the Improved Short Horns, at six weeks old, is very inferior to a calf from a native cow. A great amount of veal is sent from Marlborough to the Boston market; and the marketmen and the butchers agree with the farmers in the opinion, which is very probably, after all, mere prejudice.

From a letter received from a farmer in Rhode Island, second for his excellent management to none other within my knowledge, the following is an extract:—

"My experience in cows is confined to native stock and a cross of the native and Durham. Some of the latter have been good milkers, but not superior to the common stock. From one I probably obtained nine quarts per day on an average for the year; and from a native cow, twelve quarts for the same period. I do not know the exact quantity, but from the circumstance of having milked them myself from first to last, and from weighing at different periods, I am confident it is not overrated. Their keeping well at pasture, which was poor, was some hay daily, and perhaps three quarts of Indian meal. When confined to the barn there was an addition of three quarts of oil meal, or, as a substitute for this, twice the quantity of shorts."

I give an extract of a letter from another farmer, resident in Medford, in this county:—

"Of the Durham stock, I have but three, a bull and two cows, imported by R. D. Shepherd, in 1839. One of these cows is of no value as a milker. The other is a very fine animal in appearance, but has no milk. She had her first living calf on the 25th August last, and while the feed was good averaged about fifteen quarts of milk ten days. She has since gradually fallen off to about ten and a half per day, which she gives now (November). Her milk has never been separated from that of the native cows; I can therefore say nothing definite of its quality. I have been less curious and exact in measuring it and trying its quality from having always understood this stock to be more distinguished as beef cattle, than for any peculiar excellence as milkers."

These are the only particular and detailed statements which I have been able to obtain. My own experience, either with the full bloods or the mixed breeds, has not been favorable to them for milk or

butter. I visited some time since the yard of a farmer in this State, who has passed the highest encomiums on this stock for their dairy properties, saw his cows milked, and measured the milk. He had 5 animals,—2 as I understood, of full blood, Denton's progeny; 3 of mixed blood; and some other native cows. It was in September, and the pasture was abundant. The best animal in the yard at the morning's milking did not give more than four quarts; the second not more than three; the third, one quart and a half. It is not necessary that I should give any further minutes.

I feel myself bound in honor to state these facts and these prevailing impressions, leaving them to have the weight to which any may think them entitled.

NATIVE COWS.

I shall proceed now to give an account of some native cows, or cows raised among us, which have fallen under my observation; and I have only to add, that in my opinion, nothing is wanting to multiply such cows among us by hundreds but more care in the selection of the best, and a great deal more liberality and carefulness in feeding and nourishing them. I have referred to some of these cows in my former reports; I shall and others, and hope to be pardoned for the repetition on account of the importance of presenting this whole subject in a connected view.

I shall refer in the first place, to the celebrated Cramp cow, owned in Lewes, England, because as yet she bears the palm of all others; and because I wish to direct particular attention to the extraordinary care with which she was kept. She was not of the Improved Durham Short Horns. She was bred in Sussex from a Sussex bred cow; and it would seem as though she had some aristocratic blood in her veins, as it is said her great great grand sire received a prize cup at Peterborough, in 1726, though I think this must be an error for a much later period, as she was calved in 1799.

From the first day of May, 1805, the day she calved, to the second day of April, 1806, a space of forty-eight weeks and one day, her milk produced 540 lbs. of butter. The largest amount made in any one week, was 15 lbs. From May to June, she gave 20 quarts per day. From 20th June to 10th September, 1805 quarts. In forty-seven weeks, she produced 4,921 quarts of milk.

In the next year, from 19th day of April, 1806, the day she calved, to the 27th February, 1807, forty-five weeks, she produced 450 lbs. butter. The largest amount per week, was 12 lbs. The quantity of milk for the time was 4,137 quarts. During this year, she was sick and under a farrier's care three weeks after calving. She went dry seventeen days only.

In the third year, from the 6th of April, 1807, the day she calved, up to the 4th April, 1808, fifty-one weeks and four days, she produced 675 lbs. of butter. The largest amount made in a week, was 18 lbs. The quantity of milk given in that time, was 5,782 quarts. In the fourth year, from the 22d April, 1808, the day she calved, to the 13th February, 1809, forty-two weeks and three days, she produced 466 lbs. of butter. The quantity of milk given in the time was 4,219 quarts. In the fifth year, from April 3d, 1809, to May 8th, fifty-seven weeks, her produce in butter was 594 lbs. The amount of milk given in the time, was 5,369 quarts. The largest quantity of butter in any week, was 17 lbs. This is the most extraordinary cow of which we have any record. Though it has been presented to the public before, yet the account may not be accessible to all; and I deem it useful to state the mode of her treatment.

In the summer season, she was fed on clover, lucerne, rye grass and carrots, three or four times a day; and at noon, about four gallons of grains and two of bran, mixed together, always observing to give her no more feed than she could eat up. In the winter season, she was fed with hay, grain, and straw, mixed as before stated, feeding her often, viz. five or six times a day, as was seen proper, and giving her food when milking; keeping the manger clean, where she is fed with grains; not to let it get sour; wash her udder at milking three times with cold water, winter and summer; never tied up; lies in or out the barn as she likes; particularly careful to milk her regularly and clean. Milch cows are often spoiled for want of patience at the latter end of milking time.

I now proceed with a list of cows produced and raised among ourselves; not a distinct but a mixed race; raised under innumerable disadvantages; yet showing, in a remarkable manner, what valuable materials we have to work with.

1. The Oakes Cow in Danvers, Mass., produced in 1813, 180 lbs. of butter; in 1814, 300 lbs.; in 1815,

over 400 lbs.; in 1816, 484½ lbs. During this time one quart of the milk was reserved daily for family use, and she suckled four calves for four weeks each, in the course of those years. She produced in one week 19½ lbs. butter; and an average of more than 16 lbs. of butter per week, for three months in succession. The largest amount of milk given by her in one day, was 4½ lbs. She was allowed 30 to 35 bushels of Indian meal per year, and all her own skimmed milk and most of the buttermilk. At one time, the owner gave her potatoes, which increased her milk, but not her butter. In the autumn, he gave her about six bushels of carrots.

This cow came into the possession of Josiah Quincy, then of Quincy, who had at the same time a large cow of English blood, the progeny of a celebrated imported cow, and owned by John Welles, of Dorchester, whose improved stock are held in high estimation; but as to their legitimacy in the Short Horn family, or the strict purity of their blood, I cannot speak with confidence. On a trial of this Oakes Cow with this English Cow for a fortnight under the same food and treatment, the English Cow produced 16 lbs., the Oakes Cow thirty-two lbs. and a few ounces in that time.

2. The Nourse cow, owned in North Salem, made 30 lbs. of butter in one week, and averaged 14 lbs. butter per week for four successive months.

3. The Haverhill heifer, two to three years' old, produced 14 lbs. of butter in a week after her calf was killed at six weeks old, and more than 18 lbs. of butter in the ten days after her calf was killed.

4. Cow owned by John Bart, in Salem. 1822. In 174 days the weight of milk was 7611 lbs. No. of quarts, beer measure, 2965½
1823. In 268 days, weight of milk was 7517 No. of quarts, beer measure, 2923

The sales from this cow, including the calf at 5 dollars and milk at 5 cents per quart, in 1822, was \$153.25. In 1823, \$151.15.

5. Cow. John Stone, Marblehead. From June to October, this cow averaged 11 lbs. of butter per week.

6. Cow. N. Pierce, Salem. 3,528 quarts of milk per year, nearly 10 quarts per day.

7. Jeremiah Stockney, Rowley. 19 quarts daily; calf at 6 weeks old weighed 196 lbs.; gain 2 3/4 lbs. per day.

8. Cow. Isaac Osgood, Andover. 17 quarts of milk per day; made 56 lbs. of butter in the month of June.

9. Cow. S. Noah, Danvers. In 148 days from 2d May, gave 587½ gallons milk; more than four gallons per day for that time. This cow calved on the 29th of April, and in the 148 days succeeding the 2d of May, she yielded 605½ lbs. of milk.

10. Cow. T. Flanders, Haverhill. From 20th April to 22d September, besides 404 gal. one milk used for family, made 163 lbs. 4 oz. butter.

11. Cow. Daniel Putnam, Danvers. "This cow calved May 21st. The calf was sold June 20th for \$7 62½. During the 30 days that the calf suckled, she gave more than her milk 17 lbs. of butter. From June 20th to September 26th (fourteen weeks) she gave 337½ lbs. of milk, or more than 34 lbs. 6 oz. per day. The greatest quantity on any one day was 45 lbs., or 17½ quarts. The weight of a quart of her milk is 2lbs. 9 oz. The greatest quantity in one week was 288 lbs. The quantity of butter made in the same fourteen weeks was 139 lbs. The greatest amount in one week was 12 lbs. 2 oz."

12. Cow. Owned by William Osborn, Salem. The milk of this cow from January 24th to April 10th, was 3127 lbs. varying from 33 to 48 lbs. per day, averaging 40½ lbs. per day during that time.

13. Cow. Owned by Richard Elliot, Danvers. This cow's milk gave 16 lbs. of butter in one week; and she yielded on an average from 15 to 18 quarts per day, beer measure, for a length of time.

14. The yield of a cow owned in Andover is remarkable. Her origin is not known, but her appearance indicated a mixed blood; and I was led to believe she partook of the Yorkshire blood, a race of cattle which I have found in the neighborhood of Moultonborough and Canterbury, N. H., but whose introduction I am not able to trace.

In 1836, besides supplying the family with cream and butter, there were sold 127½ gallons milk at 14 cents per gallon, \$17 88
160 lbs. butter at 25 cents, 41 50
Calf sold, 8 00

\$67 38

"The keeping was good pasture and swill of the house, including the skim milk, with three pints of meal per day." These statements show, in a strong

light, the difference between a good and a poor cow; and the utility of liberal keeping.

15. A cow of Samuel D. Colt of Pittsfield, from 1st December to 26th April, 148 days, produced 193 lbs. of butter.

16. A cow owned by R. Campbell of Pittsfield, has yielded 285 beer quarts of milk per day.

17. A cow owned by Hosea Merrill, gave 30 beer quarts of milk per day.

18. A cow owned by D. Fenn of Stockbridge, 8 years old, produced in one week 12 lbs. 9 oz. butter. During the same time, 10 quarts of the milk were sold, and in addition cream and milk were used freely in the family.

19. A cow owned by Calvin Davis, 4 years old in the spring of 1838, in 172 days produced 225 lbs. butter, and fattened a calf. An accidental injury to the cow prevented a continuance of milking butter.

20. Two cows of Wm. Dewey, of Alford, in good season, averaged, for a length of time, 14 lbs. of butter each per week.

21. A cow belonging to the late Dr. Hyde, of Stockbridge, for some time produced fourteen pounds of butter per week.

22. Two cows in Vandensenville, produced 14 lbs. of butter each per week.

23. A cow belonging to — Millard of Egremont, produced 14 lbs. of butter per week.

24. From two cows belonging to Russell Brown in Cheshire, besides the free use of milk and cream in the family, 90 lbs. of butter were produced and sold in three weeks, and in four successive weeks 114 pounds.

25. A cow owned in Stockbridge, by Stephen Willard, produced as follows:

In 321 successive days 231 lbs. butter.

" 251 " " 293 "

" 306 " " 318 "

911 days 912 lbs.

"The above is exclusive of 25 lbs. made while fattening three calves." He adds "my method of keeping has been grass only, from spring to fall. In the fall I begin with pumpkins and potatoes, and feed moderately during the time she gives milk. An account has been kept for only three years; but it would not vary much from the above, for the two seasons I have had her, except the present season she has been farrow." This cow is now eighteen years old, "and will calve again about the middle of February."

26. Two cows owned in Pittsfield, produced each 50 lbs. of milk per day; and one other 32 lbs. at a milking.

27. A cow owned by Thomas Hodges, in North Adams, produced last year 425 lbs. of butter; 400 lbs. of this amount were made in nine months. Her feed consisted of one quart of rye meal, and half a peck of potatoes per day; and very good pasturing.

28. A cow owned by Joseph F. Upton, of Ashfield, Franklin Co. From the first of April, 1837, to the middle of February, 1838, her product was 335 lbs. 15 oz. From the 9th of May, 1838, to the 28th December, 1838, she had produced 303 lbs. 3 oz. of butter, and was still milking at the rate of one lb. per day.

The owner adds, "In the year 1837, I killed my calf at three days old, and gave my cow the skimmed milk through the summer. I commenced the first of October to feed on potatoes. I gave her about one peck per day boiled, as long as she gave milk. In the year 1838, I fattened my calf and killed it at four weeks old. It weighed 75 lbs. She has had nothing but grass this year, until the first of October; since then I have fed her with one peck of boiled potatoes per day. My cow is seven years old last spring." Her winter keep at present, while giving milk, is as much hay as she will eat, and one peck of boiled potatoes per day.

29. Cow. N. Sandersen, Waltham, Mass., 1828. Thirteen and one half lbs. butter per week through the season, on an average.

30. Cow. Luke Fisk, Waltham, Mass., 1824. Made 12 lbs. butter per week.

31. Cow. George H. Hardy, Waltham, Mass., 1826. Averaged, for four months, 11½ pounds per week.

32. Cow. John White, Dedham, Mass., 1826. Gave 12 pound butter six weeks in succession; one week 12 pounds 13 ounces; three months, averaged 10½ pounds per week; gave 18 quarts milk per day, at times.

33. Cow. James Robbins, Watertown, Mass., 1827. May and June, from 10 to 13 lbs. butter per week.

34. Cow. Ralph Hastings, Dorchester, Mass., 1827. Eighteen quarts per day—average 14 to 15

quarts. Before grass feed in April, the cream of two days made 2½ pounds butter, and was made from 1 to 16 quarts of cream. Two or three minutes in churning. This was the mother of Mr. Jacques's famous Cream-pot-bread.

35. Two cows—Rev. Mr. Phenix, Cluopee Mass., 1828; for several weeks averaged 20 lbs. per week, besides what milk and cream were used in the family.

36. Cow. W. Chase, Somerset, R. I., 1831. Most of the season, 20 quarts milk daily; averaged nearly 11 pounds butter per week during the season; 120 pounds made in ten weeks.

37. Cow. Isabel Graves, Northampton, Mass., 1830. Four years old; one week, 13 pounds 9 oz. butter.

38. Cow. L. Homer, Bedford, Mass., 1830. 11 pounds butter per week.

39. Cow. Josse Putnam, Danvers, Mass., 1830. Averaged more than 208 pounds butter each in the season; highly fed.

40. Six cows, J. Curtis, Marblehead, Mass., 1830. Averaged over 181 lbs. butter each in the season, without extra feed.

41. Cow. W. Dickinson, Deerfield, Mass., 1830. One week, 14 lbs.; first eight weeks after calf was taken away, made 96 lbs. Six quarts of milk made one pound of butter.

42. Cow. H. G. Newcomb, Greenfield, Mass., 1830. From March 27th to May 25th, made 100 lbs. of butter, and reserved 160 quarts milk. In 14 days, made 20 3/4 lbs. butter.

43. Cow. D. W. Greenfield, Mass., 1830. In one fortnight made 25 lbs. butter. In May 1832 she produced, in one week, 15½ lbs. butter. Average daily weight of milk, 47 lbs. Measured one day 36 beer quarts.

44. Two cows — Hart, Shelburne, Mass., 1834. Besides milk and butter used for a family of three persons, they sold from these two cows, in one season, upwards of 400 lbs. butter; feed, grass only. In June, they made in one week 23 lbs., one week 25 lbs., one week 25 lbs.

45. Cow. — Barrett, Northampton, Mass., 1830. This cow milked, for one fortnight, every eight hours; at each milking has yielded a pailful, holding 10 quarts—the weight of the milk averaging daily 40½ lbs. Her milk has yielded daily 2 lbs. 6 oz. butter, making 32 lbs. 6 oz. in 14 days. From one milking alone, 1 lb. 6 oz. was made, which will give 4 lbs. 2 oz. butter in one day, from one cow; the butter was of a superior quality, and brought a high price in the Northampton market.

46. A cow owned in New London, Connecticut, yielded 10 quarts milk per day, for 14 successive months.

47. Cow. I. G. Tyler, Bradford, Mass., 1830. From April 1 to Sept. 28, produced 154½ lbs. of butter. In the second week in June, she yielded 126 quarts of milk, beer measure, at the rate of 18 quarts per day for that time.

48. Cow. C. C. Sewall, Danvers, Mass., 1830. From the 26th of June, in 95 days she gave 3159 lbs. or 127½ quarts beer measure. The greatest quantity in one week was 116 quarts; in one day, 17 quarts, 1 pint. The daily average quantity was 13 quarts.

49. Cow. Albert Johnson, Lynn, Mass., 27th March, 1840, when she calved, to 25th September, 1840 days, she produced 6540 lbs. of milk, or 273½ beer quarts, averaging nearly 15 quarts per day. The largest quantity any one day was 52 lbs. or 20½ quarts. She had good pasturage until the drought in summer, and then some hay and one bag (four bushels) of shorts.

The account of this cow for part of the present year is as follows. From March 29th to September 30th, 1850 days, she has given 6783 lbs. of milk, equal to 271½ quarts, averaging 14½ quarts per day. The largest quantity given in one day was May 9th, 51½ lbs., equal to 20½ quarts. She has been sick a part of the season, by browsing the leaves and branches of the black cherry tree, which has occasioned some diminution of her milk.

50. Cow. Charles F. Putnam, Salem, Mass., From November 15, 1839, to November 13, 1840, she produced 4214 quarts of milk, beer measure, being an average of 12 quarts per day through the year. Mr. Putnam writes to me, "that the first month this summer, (1841), with two quarts of meal per day, she averaged eighteen quarts of milk per day. I am confident that the cow will give twenty quarts per day in good fair feed. She was milked till within three weeks, and could have been milked to the time, of calving."

51. Cow. Hobart Clark, Andover, Mass., 1830. 14 quarts 14 pounds.

52. Cow. Julius Smith, Cheshire, Conn. This heifer, two years old, averages 18 quarts of milk per day.

53. Cows. Spencer, Guilford, Conn. These cows average 14 quarts daily through the season.

54. Cows. Allen, Cheshire, Conn. Eight cows. 15 quarts of milk daily.

55. Cow. Shelburn, Vt. Has yielded 26 quarts, beer measure, in a day; and at two milkings in 24 hours, produced 3 lbs. 14 oz. of butter. This cow was raised in Vermont. Some persons, from her great product, call her English; but the admixture of blood is very small if any; and if any, it is not known, whether Dutch, or Ayrshire, or what. There is nothing but her color, which indicates any difference from our best formed native stock. She has some progeny by an Ayrshire bull, which are very promising.

56. Cow. S. Henshaw, Springfield, 17½ lbs. of butter per week, and in one case, 21 lbs. of excellent butter. In 14 days, it is 4 days and one milking she produced 14 lbs. 3 oz. of butter at the rate of 22½ lbs. per week. I had in a former publication marked this cow as a cross from a Durham bull; but I was misinformed. Mr. H. tells me she was a native cow without mixture of foreign blood.

57. Cow. West Springfield. This cow in sixty days produce d 2692½ lbs. of milk, averaging 44½ lbs. per day. This was equal to 22½ quarts per day for that time. She repeatedly produced over 50 lbs. and sometimes 51 lbs. of milk per day. I have the exact daily returns for the time.

58. Cow. O. Morris, Springfield. "The summer after she was seven years old, the quantity of butter made from her between the first day of April and the first of September, five months, was 206 lbs. During the time, we used milk and cream in the family freely. Some weeks we have made 14 lbs., exclusive of milk and cream used for family purposes. I have often weighed her milk in the month of June, and she has frequently yielded 31 lbs. at one milking at night. We have been particular to have her milked in the summer at five o'clock in the morning, and at seven o'clock in the evening, and always by the same person. I think much of regularity in the times of milking; and that one person only should be permitted to milk the same cow the same season. My cow has always had a good milker, and her milk has been rapidly drawn. Her food in the winter is good hay, and in addition thereto from 2 to 4 quarts of rye bran at noon. I feed and give her water three times each day. In the summer, besides the pasture, she has 4 quarts of rye bran at night. From the experience I have had with this cow, I feel quite sure that many cows which have been considered as quite ordinary, might, by kind and regular treatment, good and regular feeding and proper care in milking, have ranked among the first-rate."

59. Cow. Roxbury. This cow, besides taking care of her calf, produced 3975 beer quarts of milk in one year or before her next calving, which was within the year.

60. Cows. J. P. Cushing, Watertown. "There has been no account kept of any of our native cows. Several of them, however, on grass, and also in the winter (soon after calving) have given 20 quarts a day for a month or more. Several of our native cows, particularly two which you recommended, give a greater quantity of milk than any of our imported cows, with single exception."

61. Cow. Page, Danvers 13 lbs. butter in one week; 20 lbs. in three successive weeks.

62. Cow. B. Shuttlefield, Chelsea. Supposed to be of the Galloway breed, small cow, has given 21 quarts per day.

63. Cow. Daniel Breed, Lynn. "She is six years old. She gives now (Nov. 19,) on grass and 13 peck of roots, six quarts of milk per day. She has not had any hay or meal this fall, and all the hay consumed by her last winter, was 2900 lbs. without bran." She calved last April, and comes in again March 12th. She gave in June an average of 45 lbs. of milk per day, and has given 2490 quarts the last seven months. She is milked until within a few days of her calving. What is remarkable about the cow is her small size, and its requiring so little food to produce so much milk." The above measures are all ad and beer measure.

64. Cow. "George Goodnow, of Southborough, in the county of Worcester, keeps 10 cows upon his farm. He has kept an accurate account of their produce for a number of years. The amount of butter made from these 10 cows in the season of 1839, was 2172½ lbs. The amount sold 2028 lbs. The amount used in his family, 144 lbs. During the month of June, the same season, the 10 cows averaged

9 lbs. each per week on grass feed alone. He has a number of cows that have made 104 lbs. per week and one that he has made 114 lbs. from. After the 1st of December he makes no butter, but sells his milk during the winter, the account of which has been mislaid. His calves suck till they are 7 weeks old, then they are mostly slaughtered. The cows are dry from 2 to 3 months previously to calving. In the season of 1840, the butter made from 10 cows was 1965 lbs. Amount sold, 1831 lbs. Amount used in the family, 134 lbs. Mr. G. had not footed the account for the present season, (1841,) but he said it would not probably vary much from the two previous years. The cows are all native. You may rely upon the above being correct.

65. From 30 cows in Cheshire, Berkshire county, all native cows, an average of 435 lbs. of new milk cheese has been produced to each cow, and 10 lbs. butter, or 300 lbs. in the whole in a season.

66. Two dairies in Cheshire: one of 21 cows, produced 626 lbs. of new milk cheese, and 1700 lbs. of pork were made on the same farm, half of which was to be credited to the cows: one of 18 cows, produced 623 lbs. of new milk cheese in a season, and 1000 lbs. of pork were made the same season on the same farm. Two quarts of rye meal were given to each cow two months the first of the season, and one quart for one month during the last of the season. Most of the time they had their whist to rich.

I might greatly enlarge this list by a mention of other native cows as remarkable as those to which I have referred; but here I shall submit the case. The beauty of the Improved Durham Short-Horns and their perfection of form are admirable. They come with good keeping early to maturity. They have a tendency to keep themselves in good condition; and with extraordinary feeding and care, they arrive at a large size, and some individuals, all points considered, have surpassed any thing within my knowledge. The Chelmsford ox, a half-blood Durham, whose pedigree is not known, which was sent from this country to England for exhibition three years since, was pronounced by competent judges the finest animal of the kind ever seen there. His live weight was reported as not far from 3700 lbs. The Greenland ox was nearly as heavy, and singularly beautiful. A native ox exhibited in Boston, in 1840, did not differ much from these in size, fullness, and weight; but compared with them in appearance, he was misshapen and deformed. The Durham cows, in general, especially the selected ones, which have been imported on account of those qualities, are large milkers; but their milk seems generally inferior as to richness or butteraceous properties. The milking properties of Mr. Whitney's stock at New Haven, are very remarkable. The Durham cows are large animals, and should be expected to secrete largely of milk; but many of them, however, are inferior as milkers; and, upon as calm and impartial a view of the subject as I can take from my own personal observation, I cannot pronounce them, as a race distinguishedly preferable to all others for their dairy qualities. I have come to this conclusion with very strong prejudices in their favor; and as I measure my words in this case, I wish to be judged only by what I say.

Whenever a Short-Horn cow proves an inferior milker, the enthusiastic advocates of the race are pleased to tell us that it is because she has no pedigree, and is not a herdbook animal; but admitting that her genealogy is somewhat mixed, it is singular that the virtues of the blood should not show themselves to a degree, and that the impurity or defect should always predominate. It is certain, however, that many mixed bloods have in every respect exceeded many of the pure bloods.

In regard to what we call our native stock, in which various bloods and breeds are intermingled, many of them are indeed miserable in appearance, in shape, in condition, and every other quality. This comes in general from neglect and indifference, because we kill or sell to the butcher our best calves, and commonly leave what we do attempt to raise, "to shift for themselves." Yet at the same time, without presumption I think, New England may challenge the world to produce finer teams of oxen, by fifties and hundreds of pairs, than there to be found at our cattle-shows. Let any intelligent judge of stock go into Worcester county, Mass., into New Haven and Hartford counties, in Connecticut; or especially to Sacerapoe, in Maine, where ox teams are constantly employed in carting lumber to Portland, and if he will find any superior oxen for labor and condition than are to be found there, he would do a signal favor to the agricultural public in letting us know where we may look for them. I have seen none. I believe we could search the world over in vain to find any.

Our native cows are of every variety, but there are several parts of the State where, though it cannot be said that any scientific or systematic improvement has been undertaken, yet by a long-continued selection from the best, whole families or breeds are to be found distinguished for their excellent properties as dairy stock. The list of native cows, which I have given, shows conclusively that we have those which, for the quantity of milk they give, are scarcely inferior to any; and for the amount of butter and cheese which they produce are surpassed by none. The numbers referred to prove that they are not rare.

Whether any thing would be gained by substituting the Improved Short-Horns for our present stock, is, to say the least, questionable. The Short-Horns are great consumers. Though animals do not always consume in proportion to their size, yet this must be considered as a general rule. They require most particular attention and liberal feeding to bring them to maturity, though we admit that they arrive at maturity early. Many of the Short-Horned premium young animals which have been exhibited at our cattle-shows have had the benefit of two wet-nurses for six months. Most of our native calves are put off with two teats, and at eight or ten weeks old are turned adrift into the pasture to live or die as they please. Our own stock has never had fair play, and it treated in the same manner as the best Short-Horn stock they would not perhaps fall so far behind them as might be supposed. Our pastures are in general short and our winters long. A small race of cattle, therefore, and a more hardy stock would seem better adapted to our condition.

The London milk establishments are mainly supplied with the Short-Horns, because, it is said, they give more milk, and after becoming dry, take on flesh sooner than other races, and are therefore more easily disposed of to the butcher. The size of these animals would naturally indicate a larger yield of milk, and, at the same time, a greater consumption of food. But the yield of milk is put down at an average of nine quarts daily. These are presumed to be wine quarts, and deducting one fifth, it does not much exceed the yield of some milk establishments among us. Besides, in the London dairies, cows are not suffered to become with calf.

One of the most extraordinary Short-Horn cows known in England, it is said, produced 374 pounds of milk in a week; 17 pounds being an average quantity made in any one week. This is quoted as quite remarkable; but this, as far as it goes, does not equal the Oakes, the Nourse, the Adams, or the Springfield cow. One of the best-informed and most ardent advocates for the Short-Horns, the late Henry Berry, remarks:—"That their milk does not contain the same proportionate quantity of butter as that from the Long-Horns, the Scotch cattle, or the Devons, is probably true; but we have reason to believe that the difference has been much exaggerated, and is more than compensated by the additional quantity of milk." Whether this additional quantity of milk can be procured without an additional quantity of food, is a question which naturally arises, but which I have no means of answering with confidence.

The quantity of cheese made in a year from a cow in the celebrated cheese district of Wiltshire, Eng. is thus stated. "The quantity of cheese that is made from each cow in this district is greater than is common in any other cheese-making country, sometimes as much as 1½ cwt., or 5 cwt. per cow, seldom lower than 3 cwt. Perhaps 3½ cwt. is a fair average in a good cheese-making year on every cow that calves in proper time." In the famous district of Cheshire in England, the average amount of cheese to a cow, is stated at 2½ cwt. The old breed of Irish cattle, much valued for the dairy, will produce from 84 to 112 lbs. of butter per year; a very good cow will yield 14½ cwt. that is 168 lbs. net. Of the Ayrshire cows, kept in the highest condition for giving milk, it is stated that the yearly average in milk may be 650 gallons or 2600 quarts, (wine measure 1 pint more is intended) and 90 gallons will make 21½ lbs. of butter, or 15 quarts (wine measure) to a pound. In another case it is said "that a well fed cow of a good breed, will produce on an average 180 lbs. of butter in the season; though the common calculation is 150 lbs. In the Epping district, where there is an indiscriminate mixture of Devon, Suffolk, Leicester, Holderness and Scotch, the calculation in a well managed dairy amounts to 212 lbs. per year to a cow. In one case in Shessex, upon an actual trial, the cows produced only 136 lbs. per season."

As far then as we can depend on these accounts our own native cattle for dairy stock will not suffer by comparison with the best English stock of any of those races most distinguished for their milking pro-

perities. Our own Cheshire cheese dairies certainly yield the palm to none.

The cross of the Durham Short-Horns with the Devon has produced in many cases an excellent stock. But if of no other value to the country, their introduction will prove an immense benefit by showing our farmers what can be done in improving the size, form, and condition of their own stock, by a most careful selection from the very best, by persevering attempts to amend defects and engrain good practice in the animal constitution, and by constant care and good keeping.

It cannot be denied that a vast proportion of our cows are wretched in their form, health, and condition. There is no reason on the other hand to doubt that by breeding only from the best on both sides, and by a liberal mode of keeping, we may produce a dairy stock, and a stock for labor, as well adapted to our pasture, climate, and husbandry as can be found. Perhaps I should be authorized to add for beef also, that is, producing as many pounds according to the expense of their keep. The average weight of bullocks slaughtered at Smithfield, the great cattle market of England, is 656 lbs. At Brighton in this county, the average weight of oxen is 775 lbs., and of steers 600 lbs. each. The last is thought by some persons to be overrated. The weight used at Brighton is not weight; one hundred weight being now reckoned at 100 lbs. avoirdupois.

Sale of Cream Pot Stock,

At the Farm of S. Jaques, Charlestown, Mass.,
January 11th, 1842.

We annex a list of the animals sold, as numbered in the catalogue, with their ages and prices, which they brought. The result created almost universal disappointment. It was not in our power to attend the sale; but it is cause of much regret that, after the pains which Mr. Jaques has taken to rear a race of animals whose richness of milk peculiarly fitted them for dairy stock in New England, there should so little reward have been found for his exertions and so poor encouragement presented to future efforts. That a bull of admirable character and points, for which, as we have understood, 700 dollars have been more than once offered, should be knocked off under the hammer, for 61 dollars, is a sad disappointment.

The time of year for the sale was unfavorable. The high price of hay was against success; the scarcity of money still more against it. A forced sale, as this was understood to be, is always unfavorable. How far the animals presented could be warranted secure of the excellent properties of their ancestors, we are not able to say; and have learned that some doubts on this point operated essentially against them; but the extraordinary excellence, we mean especially the richness of the milk, of the best among them, there can be no question whatever. The fortunate owners of the best animals will, we hope, do them full justice. We only wish that Mr. Jaques could have found a more essential reward for his exertions than the satisfaction of having led the way; and we believe with much success, in endeavoring, on enlightened principles of breeding, to form out of the materials which we have at hand, a stock adapted to the purposes of the dairy and to the climate and pastures of New England.

BULLS.

No. on Catalogue.	Name.	Age.	Price.
13.	Clyto,	2 yrs.	\$10
7.	Medium,	2 1/2	22
16.	Globe,	3 1/4	15
5.	Orange,	4 1/2	10
8.	Curlew,	2 1/2	28
3.	Don,	7	64
10.	Count,	3	23
12.	Silver,	2	26
14.	Leo,	9	8

HEIFERS.

26.	Topaz,	1 3/4 yrs.	\$21
28.	Nymph,	1 1/2	14
30.	Ghent,	1 1/4	12

31.	Branch,	1	13
32.	Chrystal,	2-3	12
25.	Crimp,	3	35
27.	Charm,	1-3-4	41
29.	Constant,	1-1-2	16
33.	Cologae,	1-2	7

COWS.

1.	Civilia,	11 yrs.	\$16
3.	Kate Bolivar,	10	31
4.	Cremopot,	16	7
5.	Glossy,	15	38
6.	Olive,	7-1-4	34
7.	Betty,	7	111
	Her calf,	24 days,	12
8.	Coral,	7 yrs.	60
	Her calf,	23 days,	62
9.	Gaze,	5-1-2 yrs.	65
10.	Dolly,	6	67
11.	Cherry,	6	35
13.	Gipsy,	5-1-2	75
14.	Anna,	5-1-4	40
15.	Lemon,	4-3-4	38
16.	Cypress,	4-1-2	35
17.	Grecian,	4-1-2	47
18.	Hulda,	4-1-2	31
19.	Only,	4-1-2	67
20.	Bountiful,	4-1-3	65
21.	Boquet,	3-3-4	39
22.	Outer,	3-2-3	71
23.	Diana,	3-1-2	45
24.	Cosset,	3-1-3	25
2.	Fanny,	11	19
12.	Coquet,	6	29

Cow Gem—not on the catalogue, was bought at 165 dolls.

Here calf 10
BELL Brilliant, not on catalogue, 51 "

PERCE SOUTH DOWN SHEEP—RAMS AND EWES.
Lot of 4 sheep brought 12 dolls. each.
" 10 " 11 "

UP The manure on the farm sold for \$5, 25 per cord, or 123 cubic feet.

Book Farming—Agricultural Chemistry.
"Strike but hear"—Aristides.

Professor Liebig has truly said that a perfect system of Agriculture cannot be understood without the application of scientific principles, as the whole system is based on the exact acquaintance with the means of vegetable nutrition.

The same learned author is establishing the doctrine that plants receive almost all their support from the atmosphere, has realized the astounding fact, that Agriculture the first of all arts and employments, and almost the only one which is certain to give health and comfort to its votary, is now in this age of great discovery and improvement, not only far behind almost every other art, but that it has not yet laid aside the swaddling clothes of its infancy.

Ask even a tolerably intelligent farmer what is the fault of sandy land, he will tell you it leaches the manure; but agricultural chemistry will tell him, and practical experiment confirm the fact, that manure does not infiltrate, unless it is where the superincumbent mass is too great to admit of the escape of its gasses to the atmosphere. The want of fertilizing power in sand is doubtless owing to its having no power to generate carbon, or to retain ammonia, for the food of the plants sown upon it; without the aid of lime, clay, or ashes; animal or vegetable manure will if constantly applied, supply the deficiency of the absent earths, but after fermentation is over, the inertness of the sand again prevails.

It strikes us that there is nothing that our farmers understand so little, as the economy of manures; it is generally supposed that the more a field of corn is manured, the greater will be the crop; as Indian corn is one of the grossest feeders in vegetable life, it produces in proportion to the aliment it receives; but as that aliment comes from the atmosphere, a moderate quantity of the most stimulating manure properly applied, with a frequent stirring of the soil, will be found to produce a better growth than a larger quantity of the most

posed that when the weeds are subdued, the hoe or cultivator has no office to perform; but nature reverses this decision as actual experiment invariably proves.—The frequent stirring of the earth lets in the oxygen of the atmosphere, which is converted by the *humus*, in the soil into carbonic acid, to be absorbed by the plants.

It should be the object of every farmer to understand the substance which goes to form the plants he is about to cultivate, in order that he may know how to apply such substances to the soil as are found to be the inorganic constituents of the plant he proposes to grow. Hence, as wheat straw contains twice as much potash as barley straw, and barley straw twice as much as oat straw; it is to the interest of the farmer to spread his ashes on his wheat fallow, rather than on his oats. It is said that those plants which contain the least alkali, may be the longest cultivated on the same soil; hence by covering old meadows with a coat of ashes, you quicken fertility by restoring that potash which was carried off by the preceding crops.

Lime is a constituent part of wheat; hence in those sections where there is no limestone, wheat only grows well as a first crop. It would not succeed then, were it not for the presence of lime and potash in the ashes of the great mass of vegetable matter buried in clearing the land.

The doctrine that *humus* is extracted from the soil by the roots of plants seems when submitted to a strict examination to be untenable. This opinion, that all vegetable nutriment comes from the atmosphere, seems of late to be corroborated by actual experiments in France. The *Phalange a Fourier* asserts on the best authority, that wheat has been grown to great perfection on a "pane of glass," without other aid or covering than a thin layer of wheat straw. In this case nature, seems wisely to provide in the *debris* of the plant, the elements for a perfect reproduction of the same plant by atmospheric aid alone. Hence the farmer should take the hint that wheat straw forms the most valuable base for manure to be returned to the wheat fallow; and that the straw alone if it could be properly distributed and retained on the sown surface, would while it prevented winter killing, secure an abundant crop.

When we reflect on the great developments which agricultural chemistry is now making for the benefit of agricultural economy; the more progressive march of our moral population in mental culture; we cannot but feel that the much wished for era, has commenced when two blades of grass are to be made to grow, where one now hardly vegetates; when instead of travelling a mile over the most fertile portion of the earth, without seeing more than two or three human tenements, with fields and fallows whose unpromising appearance hardly redeem them from the desert; we shall find every high road a continuous rambling village, animated by a rural population whose busy intelligence in the agricultural art, will offer to the eye of the beholder the interesting spectacle of the maximum of vegetable production. The problem will then be solved of what a single acre can be made to produce, by examples without number.

Waterloo, N. Y.

S. W.

The Ontario Agricultural Society.

Will hold their annual meeting and winter show at Canadawaga on Tuesday 8th Feb. current. We design, extraordinary excepted, to be among the Live Stock on the occasion, not for exhibition, still less for premium; surely not, for we do not belong to the county; but that we may, if it be allowed us, have the pleasure of making the acquaintance of some of the best farmers in the State; and joining in the festivities of one of the best day's in the year, the Farmer's Holiday.

Premiums are then to be awarded, (three) on each article, on crops of Winter Wheat, Indian Corn, Barley, Oats, Peas and White Beans. Next, three pre

Competitors for premiums on Winter Wheat to produce written statements of the kind of soil, whether clay, sandy, gravelly or otherwise. Of its location, whether level or rolling, protected by woods, orchards or hills. The manner the field has been cultivated for the last two years, whether any course of rotation of crops is pursued, and what; whether manured, and when, what quantity and of what kind. How many times ploughed and when, deep or shallow, how many times harrowed. When sowed, what kind of seed, and how much; seed covered with a plough or harrow; what time ripe and harvested. Specimens of the wheat are to be exhibited to the Committee.

Competitors on Indian Corn, Barley, Oats and Peas to produce like statements of soil, system of rotation, if any, preceding the crops, manure, how applied; when and how much, how ploughed, and number of times; quantity and kind of seed, when sowed or planted. What further culture; when ripe and harvested, quantity of produce, accompanied with specimens.

Corn to be weighed, seventy five pounds of ears of corn allowed for a bushel.

Barley, Oats and Peas to be determined by standard weight.

Satisfactory evidence will be required, as to quantity of land, amount of crops, way ascertained, &c.

To be awarded by the Committee.

In respect to roots statement's in regard to the soil and culture are to be given as for corn—the roots are to be weighed after the tops are removed.

Six premiums are likewise to be awarded on red clover Seed—three to the farmers who produce the greatest quantity; three to the farmers, who produce the greatest quantity on an acre.

The premiums on Animals we subjoin at large as their appearance now is not too late to induce competition.

ON ANIMALS.

41	For the best yoke Oxen, fatted for slaughter,	7
42	" " the second best do	5
43	" " the third best do	3
44	For the best Cow, fatted for slaughter,	5
45	" " the second best do do	3
46	" " the third best do do	2
47	For the best Steer, under 4 years old, fatted for slaughter,	5
48	" " the second best do	3
49	" " the third best do	2
50	For the best Heifer under 4 years old fatted for slaughter,	5
51	" " the second best do	3
52	" " the third best do	2
53	For the best Ram, reference to carcass	5
54	" " the second best do do	3
55	For the best six Sheep, fatted for slaughter,	5
56	" " the second best do do	3

The Fat Cattle will be exhibited on the Public Square, in front of the Court House. The Fat Sheep will be exhibited in the lot adjoining the south west corner of the Public Square.

All samples and specimens of Grain, Roots and Clover Seed, will be exhibited at the Court House.

Competitors for premiums, are requested to have their Animals and other articles at the appointed places, and ready for inspection, by 11 A. M.

Wind Mill.

The subjoined is from a gentleman on whose good judgement and faith entire reliance may be placed. The best form of a wind mill must be of much importance in places where water power is wanting.

Mn. HENRY COLMAN—

SIR—I observe in your first number the plan for a Horizontal Wind Mill, which is recommended superior to any form hitherto discovered. Should any person have occasion to erect a wind mill, even in your distant part of the country, I think he would be well paid for his journey to Roxbury before he undertook it, to examine a plan of one for which Capt. Stephen Glover has obtained a patent. I believe there has not been one erected yet on this plan; but I think he would grant any person the privilege to erect one, that it might be proved superior in simplicity and durability, and unaffected by gales or storms, and that it will run equally steady and rapid in a gentle breeze as in the gale.

I am with respect and esteem,

For the New Genesee Farmer

Durham Cows as Milkers.

Messrs Editors—I noticed in the New Genesee Farmer of a few months ago, some remarks of Mr. Colman concerning Durham Cows as milkers. Mr. C. speaks well of the Durhams in most respects, but remarks that he yet wants the proof of their being the best breed of cattle for the dairy business. For my part, I am satisfied that they cannot be surpassed by any breed in America; and I think if Mr. Colman would lay aside all prejudice and take the pains to inform himself that I have, he would be of the same opinion that I am.

I was raised in the State of Vermont, where the dairy business was carried on extensively, and I have taken great pains to obtain information respecting this branch of business, and I can safely say that I have never seen any breed of cattle that would equal the Durham for the dairy. I have some half, and three quarters blood, and some of my neighbors have the full bloods, and I challenge Mr. Colman or any other gentleman to produce their equal among native cows, in the quantity and quality of milk. I have a Durham heifer, two years and a half old, that has often given 31 quarts of milk per day, and that of a good quality; and I have some others almost equal to her. One of my neighbors has a full blood Durham cow that he values at \$300; he offers to give the cow if she will not average 32 quarts of milk per day, for a month at a time, and that of superior quality; the cow to have no other feed than a good pasture. I could mention a vast number of other cases to show the excellence of Durham Stock for the dairy. The question is well settled in the South part of Ohio.

Yours &c

E. D. SMITH.

Brown City, Ohio, 1811.

Remarks.—We are most willing to be enlightened, and are much obliged to Mr. Smith for the kind suggestion, "that if Mr. Colman would lay aside all prejudice and take the pains to inform himself that I (Mr. E. D. Smith) have, he would be of the same opinion." This is all charming; and Mr. Colman promises that he will do his best to follow his friend Smith's advice, and make some inquiry in regard to this new race of animals about which Mr. Smith speaks, and about which poor Mr. Colman never heard before! Mr. C. cannot promise to lay aside all prejudice because he may be under its influence without being aware of it; but he humbly hopes his chance, being no dealer in cattle, to escape prejudice in this case may be about as fair as that of some of his Ohio friends, who have improved Durham Short Horns to sell.

Mr. Colman has gone very fully into this subject in his Fourth Report on the Agriculture of Massachusetts, in the chapter on Dairy Stock; in which it will be seen that, without having had the honor of receiving Mr. Smith's card, he has virtually accepted his challenge to produce "native stock which equal the Durham Short Horns in the quantity and quality of their milk." This chapter from his report which has just issued from the press, is given at large in the New Genesee Farmer; and it will be seen then by the impartial observer, whether Mr. Colman stands fire or not, or whether he has been completely demolished by the sledge hammer of Mr. Smith.

Mr. Smith's communication is of the same character with many both verbal and written, with which Mr. Colman has been favored; and now let us see how much of it is fact and how much of it, we say it without any disrespect to Mr. Smith, is mere words.

The first fact stated in it then is this, "I have a Durham Heifer two years and a half old that has often given the one quart of milk per day, and that of a

few questions. Were these quarts beer quarts or wine quarts? because it makes a fifth part difference! How was the milk measured, in a quart measure, a gallon measure, or a pail? How often has this cow done this; twice, or a week, or a month? How was she fed at this time? How did Mr. Smith determine the quality of the milk? Did he make butter, and did he ascertain how much butter she would make to a quart of milk or in a week or a month; and if he did why did he not state it? The only test of the good quality of milk is in the butter, which it produces? Again, Mr. Smith says "he has some others almost equal to her." The common saying is that almost is more than half! What does Mr. Smith mean by it? does he mean any thing more than that they are a little more than half as good? and if so, and it he knows what they are, why does he not give us some actual measurement in the case?

The second fact, which Mr. Smith states, is that "one of his neighbors has a full blood cow that he values at three hundred dollars; he offers to give the cow, if she will not average thirty-two quarts of milk per day for a month at a time, and that of a superior quality, and the cow to have no feed excepting that of good pasture." Now all this is just such flummery as we hear every day. Who is this neighbor? Will he give his bond or his word of honor to do this? Does he mean beer quarts or wine quarts? Why does he not try the cow without a bet? He can do it without much trouble. Why does he not see how much butter she will make in a week or a month, and let us know the fact, so that there can be no possibility of mistake or deception? We do not say that the states what is false; we do not know that this cow will not do this and more than this; but we do say, that there will be no difficulty in his getting three hundred dollars for his cow if she will do what is here stated, and if her pedigree is genuine. It is said that Mr. Clay in Kentucky got two thousand dollars for a cow, which certainly did not promise better than this.

Again we should like to ask Mr. Smith, if these extraordinary properties are characteristic of the breed, why we do not have more of these gifted animals among the Short Horns. It is one thing to find extraordinary individuals and another a whole race. Will Mr. Smith inform us likewise, if this is the best race in Great Britain, why the first farmer in England Mr. Coke (Lord Holkham) prefers another race? and in the next place why the Herefords take the prizes at the English Cattle Shows as often as the Durhams?

Now Mr. Smith may be assured, that we have no prejudice against the Durhams. We admire them and mean to do them ample justice. We cannot see any reason why he or our friend Allen should erect their quills and dart their hard looks at us in this manner. We have no Short Horns to sell. A burnt child dreads the fire; and we shall not try again. If Mr. Smith has any valuable and well authenticated facts to communicate, we shall be most happy to receive them. As to "guesses, and almoses, and challenges," we have little regard for them; and have seen in our day as much of cow-jockeying as horse-jockeying.

Fuel.

Farmers who *drive* instead of being *driven* by their business, will be busily occupied in winter in drawing and cutting up their wood for summer use. The great advantage of dry over green wood is generally understood. Green wood usually contains at least one third of water which is evaporated as it becomes seasoned, as is proved by weighing it: this amounts to several barrels of water in

wasted, generally at least one-half. The only case in which green wood can ever be tolerated, is where the draft is so strong up the chimney, as to carry off the greater part of the heat; as in fire-places, and badly constructed stoves. But in stoves where the draft can be closed both above and below the fire to prevent this sweeping of heat up the pipe, the use of well-seasoned wood will be found a matter of great economy.

Small stove-wood, cut up green in winter and placed in an airy wood-house, will be well seasoned by mid-summer; but larger wood requires more time. Large wood, seasoned two or three years, is decidedly better than if seasoned but one year. Those who have not spacious wood-houses, where quantities may be stored, should place their wood for seasoning where it will be most exposed to the heat of the sun, and the action of the winds. And if protected entirely from rain by a covering of boards, it will be much better. The superiority of wood thus secured in seasoning to that corded up in shady woods as is frequently done, is very great. Indeed, the less compact woods, as elm, black ash, and soft maple, are comparatively worthless, unless thus thoroughly dried. J. J. T.

Roads.--Evergreens.--Seckel not ("Seckle") Pear.--Mediterranean Wheat.

(In a letter from Cayuga county.)

In the haste of writing my last letter, I forgot to mention the operation of SCRAPING THE ROADS as soon as they are dry enough after the ground has been soaked, and the ruts become deep. Except THROWING OFF THE LOOSE STONES from the beaten track, there is nothing that improves them so much with the same amount of labor. It is true the effects may not be permanent in rainy weather; but the chances are much in its favor, and the expense is too small in proportion to the benefit, to constitute any valid objection.

When the roads are full of ruts and hubs, which happen more especially in the spring, it is very fatiguing for the team, and straining for loaded carriages to pass. In many districts, the overseers let the traveler work along over such obstructions in the best way he can—and for weeks and months—until the hoof and the wheel batter down the hubs, and gradually fill up the ruts, while one man with a scraper and a yoke of oxen, could make it all smooth throughout the whole district in half a day, or a day at the furthest. Work of this kind is a real labor-saving operation, evincing both intellect and benevolence; and entitling the overseer who directs it, in no slight degree to the respect and regard of the community.

A scraper of this kind is easily constructed of plank 8 or 9 feet long, guarding the edge that breaks the hubs, with a bar of iron.

In stiff clays, a heavy roller to precede the scraper, would render the operation more effectual.

As Noah Webster has not given the word *hub* as we use it, a place in his Dictionary, I copy the following definition for the accommodation of you distant readers, from an article I wrote several years ago.

Hubs—Such parts of a road as have been raised when muddy, by the hoofs of horses or cattle and have become hard by drying or freezing.

The trade in evergreens amongst us, is increasing; and wagon loads from swamps of the neighboring counties, are brought every spring and fall by peddlars who find a ready sale. It is quite a

arance of the country, especially in winter, I make the following suggestions.

Evergreens generally succeed best when set out the spring; and for this reason: a plant in a suppled condition is less hardy than when it is in perfect health. Besides the leaves of evergreens sustain their sensibility throughout the year; and if the roots are much mutilated, or become dry in autumn, they must stand six months without nourishment.* Such a fast is too much for them. Even deciduous shrubs when taken from the woods at that season, not unfrequently die down to the root. These however, may 'revive in spring, sending up new stems; but no such resuscitation awaits the pine or the spruce. When their leaves fade and drop off, there is no hope of recovery.

But when an evergreen is transplanted in the spring, it has time to recover from its crippled state, before the rough hand of winter assails it. Without delay it begins to acquire new roots and nourishment; and takes possession of the soil before any adverse season approaches.

The roots of evergreens generally incline to spread near the surface; and in this they should be indulged, and not loaded heavily with earth. To secure the trees against wind, they should be well fastened to good stakes firmly driven into the ground.

To compensate them for the rich muck and moisture of the swamp, give them liberal supplies of chip-dirt, mixing it well with the soil; and water them moderately in dry weather. A covering of leaves or litter over the roots would be useful to prevent the earth from caking or hardening, to protect the shallow roots from the heat, and to assist in retaining the moisture.

Evergreens from the swamps or woods have to acquire new roots before they can flourish in arable land. After the first year, they are generally out of danger from transplanting; but two or three years elapse before they send up vigorous shoots. On this account, they are much more likely to grow from the nursery than the swamp.

The most beautiful of our native evergreens, is the Balsam Fir. The White Pine, White Spruce, Red Spruce, and White Cedar of the swamps, are also fine; and the Hemlock and Red Cedar are likewise deserving of a place in the door-yard or shrubbery.

Pedlars of evergreens are not always to be trusted. Last fall, one of this enterprising class, called on a friend of mine, and offered to sell him trees of a rare and extraordinary kind. He had purchased the seed on ship board, and raised them in a nursery of his own in a distant county. They were beautiful evergreens, bearing red berries! What an acquisition! My friend bought some, but learned in a few days they were the Red Spruce—probably from a swamp in Tompkins or Cortland county!

Lawrence Stokell was a merchant of Philadelphia, distinguished for his wealth, public spirit, and benevolence; and always spelled his name in this manner. One of the streets of that city is dedicated to his memory. The original pear tree, bearing this name, was found on his farm about one mile above the confluence of the Delaware and Schuylkill rivers. It was still standing there eight or ten years ago, though somewhat decayed on one side. All pomologists who are averse to having their

names twisted out of shape, ought to assist us in resisting such innovations.

I was conversing lately with a friend of mine from the neighborhood of Philadelphia, in regard to the *Mediterranean Wheat*, which he considered a very valuable kind; and we concluded that the writer* in the Farmer's Cabinet who thought it so inferior, must have meant some other sort. The editor of that paper ought to be competent to settle such disputes. He is "inclined to believe" it however, "a spring wheat which ripens in three months from the time of sowing"; while my correspondents represent it as a winter wheat; and one of them remarks that it bears to be sowed "early" in autumn.

Since my former communication relative to this wheat was written, I have received a letter from a (third) correspondent, living remote from the others, and dated near Moore Hall, in Schuylkill township, Chester county. It contained the following postscript:

"Have you the *Mediterranean Wheat*? If not, get it."

Ploughing Matches.

I was gratified to see in your last number, the just and excellent remarks of Myron Adams, on these matches—where the man wins the prize, usually, who drives his horses most severely. In addition to what is there suggested, I would propose that the reward be given to the man whose work most nearly approaches that of a perfect ploughman in his common, every-day operations. The team should move quietly, moderately, steadily; and the furrows should be of uniform width and depth, handsomely turned, and as straight as a mathematical line. The object of these exhibitions, is to improve the art of ploughing; to render it what it should be, for every day work; and not for the purpose of wearing out horses by over driving. It is not the man who scratches over most ground in a given time, but he who does his work best, deserves commendation.

There is one other thing that needs attention on these occasions. The committees who superintend the work, can always find some man in the neighborhood, who has a field, full of stumps, stones, knolls, ditches, and so forth, and who, wishing, if possible, to save his own team the irksome job, would be very glad to have others plough it for him, and therefore offers it for the occasion. Instead of the worst, the best field should be selected; which public spirit, or money, or local pride, if nothing better, certainly ought to accomplish.

And just allow me one remark on the reports of fairs. We have had column after column, containing nothing but the information that A. B. has the fattest hog, and C. D. the finest calf, and E. F. the largest crop of corn, G. H. the heaviest crop of wheat, and I. J. K., &c. the second best of all these; but of what use is this information to the tens of thousands of readers of an agricultural paper? Five readers out of twenty thousand may know the individual named: and here the value of the report terminates. How large the crops were, or how they were raised, or what the size, quality, and breed of the animals were, we are wholly unable to determine. But if the amount of the product and the means by which it was obtained, were given, all would be more or less benefited.

J. J. T.

Laying out Farms.

There is one department of agriculture very much neglected,—that is the laying out of farms

*See New Gen. Far. Vol. 2, page 172.

for convenience and economy. Much attention is given to improvements in stock, in implements, in modes of culture, and in the construction of farm buildings, all of which are of the very first importance; but the proper disposition of the different fields of a farm, for the sake of economy in fencing, for convenience of access, and for a full command of pasture and protection of crops, has hardly received a word of attention in any of our agricultural journals.

Many farmers suppose that this business may be very quickly disposed of; and that a few minutes, or a few hours at most, will enable any man to plan the arrangement of his fields about right. But this is a great error.

Even where the farm is as simple in its shape and situation as can possibly be, which is that of a square or parallelogram, in a level country—there are many things to be considered in laying it out. In the first place, we all know that the fencing of a moderately sized farm costs generally, at least several hundred dollars; and it is very desirable to do it well, so as to protect every part of it, and at the same time use as little material as we can. To accomplish this, much will depend on the shape of the fields. A certain amount of material will enclose more land in the shape of a square, than in any other form.* Hence it is important that all the fields should be nearly square. The disposition of the lanes which lead to the field, is a matter of importance, in order that they be not of unnecessary length, and consequently require an unnecessary quantity of fencing, and occupy more land than is absolutely essential. But there are other considerations which may materially affect these rules.

For instance, it is exceedingly desirable that land of similar quality may be in one enclosure. Some may be naturally too wet for any thing but meadow or pasture; some portions of the farm may be much lighter than others, and susceptible of ploughing while others are not; and some may be sterile, and need all that can be done by manuring and ploughing-in green crops. All these kinds of soil should, as far as practicable, be enclosed, each in its separate boundary. The situation of surface drains, which are needed on all farms, and which should form a part of the boundary of field, may affect their shape. Facilities for irrigation, a practice of great importance in our comparatively dry climate, and greatly neglected, should also be taken into consideration. Convenience for watering cattle, and other minor particulars, are not to be forgotten. All of these should have their influence in laying out a farm, even if that farm be a parallelogram in a level country.

But in hilly countries, where farms are often of irregular shape, and where it is impossible that fields can be square, still more thought is required in their subdivision, which will perhaps require years of experience to perfect. But when fixed fences are once made, it is no easy matter to remove them, and hence it becomes important to ascertain beforehand where they should be. Much trouble may thus be saved, by a judicious weighing of advantages and difficulties. For instance, a farm road, which will be much used for heavy loads, should be hard, level, and short; and the shape of fields may conform considerably to these requisitions. But a road of little importance, should not interfere with the shape of fields. So with other particulars.

In a future number, I propose to carry out these hints somewhat into detail, and perhaps give a few plans in illustration.

J. J. T.

*A circle and hexagon are exceptions in this rule, but their introduction into plans of farms would be impracticable, at least in most instances.

*That is, without nourishment drawn through the proper organs—the spongioles. Moisture would be imbibed by the bark, as it would be by the skin of a bather; but this is insufficient to nourish the leaves, except in the most favorable seasons.



ROCHESTER, FEBRUARY, 1842.

Monroe Agricultural Society, Notice.

The annual meeting of this Society will be held at the Arcade House, Rochester, on Saturday the 19th day of Feb. inst., at 1 o'clock; for the election of officers and the transaction of other important business—a general attendance is desired.

H. W. WARD, Sec.

We invite the particular attention of the Farmers to the above notice. Matters of interest are likely to be presented to the meeting and we hope every member will be in his place.

TO CORRESPONDENTS.

We respectfully solicit the continued aid of those persons, who have heretofore enriched the columns of the New Genesee Farmer with their communications. We solicit at the same time the correspondence of all disposed to aid us, to whom our paper is sent. To those who thus favor us and desire it we shall be happy to send the paper free of charge. We should be glad to receive communications and propositions from persons willing to become regular correspondents for the New Genesee Farmer upon pecuniary compensation, engaging upon our part if the communications are what we want, we will pay for them as liberally as the circumstances of our paper admit. We have no pretensions to making our paper the best agricultural paper in the country; but we promise to make it as good as our ability and means will enable us to do. We shall not be sorry if others beat us. The competition will do good. Let us have a fair field. The success of a paper or a man is not to be considered in comparison with the advancement of the great cause of an Improved Husbandry. If we are disunited at the first heat, we will try again. We will not be quarrelsome if we come out head and head. If the steed fails because the jockey does not know how to ride or to manage his horse, we think so far as we know the lad, he will at once dismount; but if not let him be thrown. The judges we have no doubt will see fair play.

To the LADIES, or as good John Q. Adams would say, to the women, which we like much better: Why should not you help us? In the present number we have a letter from a female correspondent. We shall welcome as many as may be sent us, unless they should happen to contain a gentle offer of a nameless kind, which, whether willing or unwilling, we shall be compelled to decline for the simple reason that we are provided for. Our co-laborer however, of whom we have not a print at hand or we should be tempted to give it in these days of ornamental typography, is still in an unfortunate bescausate condition, and all such letters, we shall hand over to him; with what success we cannot predict.

We should be glad to hear from our female friends on the subjects of gardening, horticulture, silk-raising, bee management, poultry management, house-keeping, house-hold manufactures, the management of children or the management of husbands, and any thing which comes within their beneficent province of mending the manners, or mending the hearts, or mending the morals. They are the salt of the social body, without which it would soon dissolve in corruption.

Explanation.—The editor hopes it cannot be necessary to say that the January number was made up without his agency or knowledge, or he could not have admitted on the last page some kind notices of himself, which his friend Batcham, with the best intentions inserted.

For the New Genesee Farmer.

Feeding Trough and Rack for Sheep.

MR. BATCHAM—I have seen several differently constructed Sheep Racks recommended in the agricultural papers, and have tried several. I have found some objection to all that I have seen. In this vicinity, where we do not feed exclusively on hay, but make use of straw, chaff, roots and bran, it is important that we have racks and troughs in which we can feed the different kinds of food in the same trough and rack. I used for several years the common board trough for feeding chaff, roots, and bran, but they were not suited to straw or hay. Last winter I attempted to improve on my board trough by attaching a rack to it; and so combined I find it the most convenient that I have seen. It is cheap and light, so that it is easily removed; and if they are kept under cover in the season when they are not in use, they will last many years.

Description of the Rack Trough.—Take pieces of timber three inches square and twenty-two inches long, and halve them together crosswise, so that the upper end will be twenty two inches apart. Make three pair of them for one trough, one for each end and one for the middle. Put into them two boards 12 feet long, 1½ inch thick; one 12 and the other 13 inches wide; put in the widest first and secure them fast to the timbers with nails and a board at each end, and you have the trough. Then bore holes one and one fourth inch in diameter, eight inches apart, and one inch from the outer edge of the board for the rack; make the sticks for the rack three feet long. I have used cedar for the rack sticks; they are sufficiently strong and are easily made. Split them one and a half inch square, take off the corners, insert one end in the holes and on the upper end put a board three inches wide with holes corresponding with the bottom, and you have a rack and trough complete. Pious feeding sheep, will find such a rack trough well worth their notice, if they feed hay and grain only.

The readers of the Farmer have reason to congratulate themselves on the arrangements that you have made in the editorial department. Mr. Colman is favorably known as an agricultural writer, and his locating himself in the Genesee Valley will open to him a new field for his usefulness. While in the agricultural survey of Massachusetts he must have laid in a valuable stock of information, from which he may frequently draw, to the interest of the readers of the Farmer, and through its columns they can interchange opinions with him. And it is to be expected that he will frequently test the hospitalities of the farmers of the Genesee Valley, and that he may frequently call on the Wheatland farmers, where he will receive a hearty welcome.

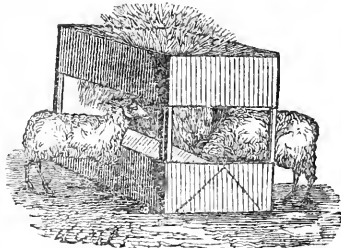
R. HARMON, Jr.

Wheatland, Dec., 1841.

Remarks on the above.—We feel obliged by the communication of our respected correspondent, and hope often to hear from him. We think his sheep rack, on some accounts, well contrived; but not the best mode. We object to all racks in feeding sheep or horses. The hay which is put into them protrudes itself between the stakes and is liable to be drawn out and trodden under feet. The position in which it obliges a horse to put his head, is an unnatural one, and must be painful one, unless, like the skinned eels, they have ceased to feel it by getting used to it. This objection does not apply so strongly to sheep; but

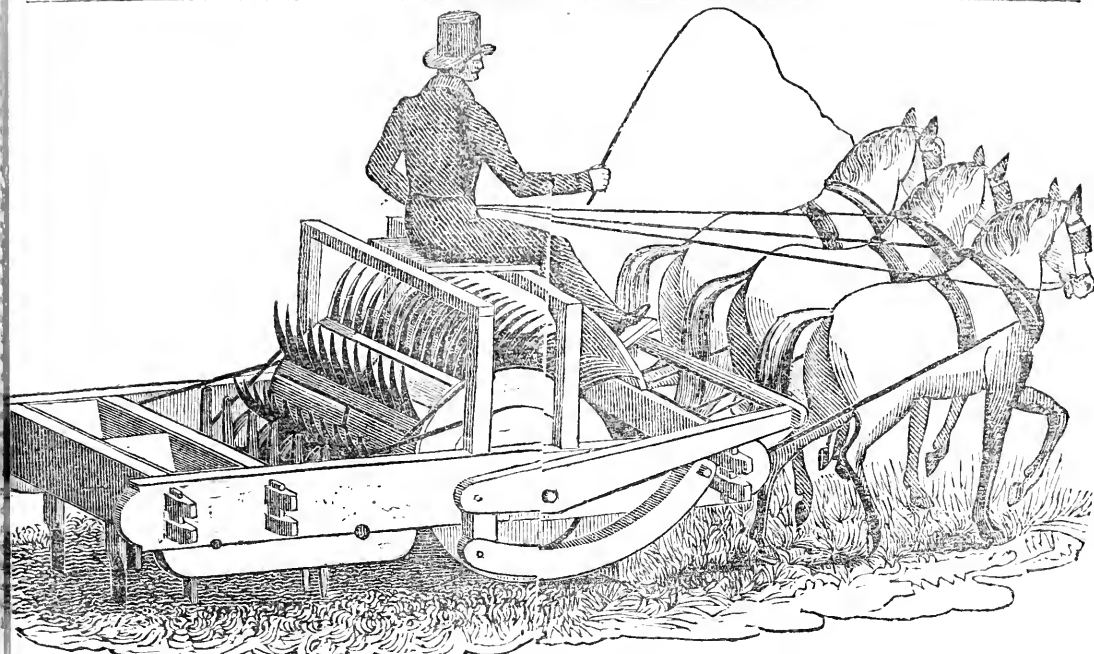
but they are equally liable to waste the hay from racks. Another objection we have to it is, that if the sheep feed on both sides of it, as we suppose is intended their heads are brought too near together; and though in general peaceably inclined, we cannot entirely depend either upon their natural temperment or their good principles, to feed quietly when placed in so close contact. We do not think, in the next place that the rack proposed is made with so little expense and trouble as our friend suggests. We do not mean however, to object to his plan without offering to the judgment of the farmers, what we deem a better one. It may not be however; but we have tried various kinds of hay-severs and mangers, and for sheep we prefer this to any other. We give it with the plan and description from our Fourth Report on the Agriculture of Massachusetts. It will be seen that by placing two pieces of board like an inverted trough, or like the saddle boards on the roof of a house, lengthwise of the manger, the bottom of the manger is divided into two troughs; and passing along as we have often done in feeding sheep, with a measure or corn or a basket of cut vegetables, lengthwise of the manger and turning them up on this ridge they are divided nearly equally on each side. The trough is equally favorable to feeding hay; and is easily swept out and kept clean; and if not made too long and heavy, is without difficulty removed from one part of the yard to the other and placed under cover as may be required. The only objection we have heard made to it, is that the wool is liable to be rubbed off of the neck or throat of the sheep. We have not experienced this difficulty, and where sheep are in health their wool is not easily started.

Hay-severs or mangers for feeding neat cattle in the yards, should be mere boxes, too high for them to think of stepping into them, and about five feet square. Four or more cattle can stand and feed at such a box without being able to quarrel by reaching each other from the opposite side, as they are likely to do, where the manger at which they are feeding is narrow.



MANGER FOR SHEEP.—Among the various racks and mangers which I have seen for feeding sheep, there is a simple form which seems preferable to any other: it is as cheaply constructed as any other, and it prevents all waste. In the common form of racks, where they are inclined outward from the bottom upwards, nearly as much hay is drawn out and trodden under foot as is consumed by the sheep.

The manger which is preferable to any other is of such length as to be easily moved by two persons, and is made with four or more upright posts, and with two boards or slats extending the whole distance round its sides and ends. The bottom board on the side may be ten or twelve inches in width; and above that, leaving a space of about a foot or fourteen inches, there may be another board of about six or eight inches in width. The width of the manger or box should be about two feet. It should have a tight bottom, with two pieces of board rising to a point in the centre, say about four or six inches, so as to form a trough on each side, into which when grain or cut vegetables are put, they may be easily reached by the sheep on the side on which they fall. The top may be left open, or a board may be so placed lengthwise in the centre of it as to prevent the sheep from jumping into the manger. I give a rough sketch of an end view of it, though the form is very common.



Cylindric Tiller and Planter.

We publish the account of the Cylindric Tiller and Planter, because we would gladly give encouragement to every attempt and enterprise to abridge, alleviate, or facilitate labor. We know nothing of this machine other than from its advertisement. It would be premature to condemn it; but we should be glad to have some evidence that it had been tried; and were glad to learn that it had been successfully tried. It strikes us at first blush as promising a great deal too much.—If it will pulverise the soil and put it into a condition for planting at the rate at which it professes to move, it will be an immense gain over any common mode of operation; but when in addition to all this, it promises with only one man, and he to ride upon the machine, to do the planting likewise, we confess we should hardly trust our fields to be sowed under such superintendence. We have seen and experimented upon various sowing machines; but we have never yet found any one, excepting the human hand, (the best upon the whole which has as yet been invented though not patented) which did not require constant watching; it would be liable to become clogged; or the dropper would not revolve; or the seed would become too damp and adhesive to run freely; or the bands would become too tight or too loose; or the hopper would become empty sooner than we were apprised of it; and many other incidents and accidents in such cases but too common. For the laborer therefore to be riding at his ease, driving three horses, and perhaps smoking his pipe at the same time, with a planting machine following him, is certainly not the most careful mode of executing this nice and most important operation of husbandry. The advertisement, and especially a part which we have taken the liberty to omit, where the machine is recommended as likely to attract young gentlemen to the pursuit of agriculture from the pleasure and amusement of this operation, is a little too much in the Panacea and Catholicon style, to induce the farmers to throw aside their ploughs in a hurry. We do not, however, condemn the machine; and when it

has been fully and fairly tried; and even half its professed merits established, we shall warmly and honestly recommend it. In the mean time we engage to keep ourselves cool; and "hearken to the evidence."

From the N. Y. Mechanic.

The Cylindric Tiller and Planter is the invention of Messrs. R. Porter and J. F. Scheerhorn, and as its name imports is designed for agricultural purposes; and in lands free from stumps and stones, is calculated to supersede the use of the Plough. It is composed of a strong wooden frame of about eight by eight and a half feet square, and in the forward part of which is fixed a cylinder, three feet in diameter, and about seven feet long, with twelve rows of sharp iron teeth, nine inches long, and twelve in a row. In the rear of the cylinder is placed a shaft, to which is affixed eleven spiders of equal length with the teeth of the cylinder. In the rear of the spiders is placed a corn or cotton planter, and both the spiders and planters are connected by wheels and bands with the main cylinder.

This machine is so arranged that when put in motion, as the cylinder rolls forward, each tooth will enter the earth, at the precise point, that in the progress of the cylinder, will come in contact therewith at the point from which the tooth projects. Each row of teeth, as soon as they have penetrated the earth to their full length, begin to break up and raise a piece of the earth or make a furrow about nine inches wide, six feet long and six inches deep. This, as it is elevated, comes directly in contact with the spiders, which as they revolve break it to pieces and pulverize it. After this comes in play the corn or cotton planter, which first opens a furrow to receive the seed, which is then dropped from the hopper, and immediately after covered.

The corn and cotton planter can be removed at pleasure, and a drill substituted in its place to plant wheat, rice, or any small grains—and by removing it entirely, the cylinder and spider is well calculated to break up and prepare the soil for any crops—sugar, tobacco, or root crops.

It is estimated, that with the Cylindric Tiller and Planter one hand, with a team of three good horses, will be able to prepare for planting and seeding, (and at the same time actually plant or seed,) twenty acres in a day, of corn, cotton, wheat, rice, or other grain. This calculation is based on the

supposition, that the team moves at the rate of about two miles an hour, and reckoning the usual time that a farmer works when engaged in ploughing, which is over twelve hours a day. This is more than ten ploughmen, with ten teams can do, with the best of ploughs in the same time. This may perhaps appear incredible, that the Cylindric Tiller should possess such great advantage over the common plough; but if we consider the immense friction of the plough on every part where it comes in contact with the earth, besides the direct resistance it meets with, by the condensation of the earth against the plough share, from the time that it begins to raise the earth from the furrow, until it throws it over, and the dead pull by which the whole has to be effected, it must be acknowledged that no machine has ever been invented, that requires so much power applied to it, to move a given weight, and works to so great disadvantage, as the plough. The Cylindric Tiller and Planter has also considerable friction, and requires some power in pressing and drawing one row of teeth in the ground, while it is elevating the earth with another, and breaking it to pieces with the spiders; yet it must be remembered that much of this friction in pressing the teeth into the ground, is overcome by the weight of the machine itself, and the leverage which the team has in revolving or rolling over the cylinder, gives it a vast advantage over the common plough, in raising the earth, and performing all its operations—and if a man can with ease force his spade into the ground nine inches, and raise a spade-full of earth, and turn it over,—and the power of one horse is equal to six men, it does not appear that it would require a very great effort for three horses with this machine, to turn over about twice nine spade-fulls, allowing the spade to be eight inches wide.

This machine will be of great advantage especially on the prairies of the west and the plains of the south, in which grain, cotton and sugar, are the great staple produce of the country. It can be made and kept in order by a common Carpenter and Blacksmith, and purchased for what one surplus team and plough would sell for.

Information respecting the Cylindric Tiller, may be obtained from R. Porter, City of New York, or Mr. B. F. Scheerhorn, Delphi, Carroll County Ia. Editors of papers who take an interest in agricultural improvements, are requested to give the above a notice in their papers.

Meeting of the New York State Agricultural Society at Albany Jan. 18th and 19th, 1842.

The New York State Agricultural Society held its annual meeting in Albany on Wednesday and Thursday, the 18th and 19th inst. The Executive committee met for the transaction of business on Tuesday, in the hall of the Young Men's Association. The attendance was large, numbering from 150 to 200 of the enlightened and strong friends of agriculture from different parts of the State. The Chair was taken by Joel B. Nott, President of the Society, and a large number of the County Societies were represented by their Presidents or by special delegates.

The room was hung round with well executed portraits of superior animals, chiefly of the Improved Durham Short Horns, and improved breeds of sheep, a large portion of them being portraits of animals belonging to E. P. Prentice, Treasurer of the Society, C. N. Bement of Albany, and other members of the Society. To an unpriced eye, accustomed to look only at the common herds and animals which are seen in our farm yards and pastures, these pictures would have been pronounced the mere fictions of the painter's imagination; but an actual examination of the animals themselves left no reason to question his fidelity to truth and nature. The pictures seemed as handsome as the painter's art could make them; and the animals were quite as handsome as the pictures.

The President's table was at the same time covered with several valuable pieces of silver plate, a tea-pot of silver, and several cans and tumblers, which were to be bestowed on the fortunate competitors for prizes at the late Fair at Syracuse.

In a neighboring room was a large and handsome show of dairy products, presented for the premiums of the Society, and some samples of vegetable and grain crops.

Some skeins of silk likewise, produced and manufactured at the Auburn State Prison, were presented for the examination of the committee.

The reports of the several committees having been made, the premiums were duly awarded and presented, some in plate and others in cash. These reports and awards will hereafter be duly given. At present not being familiar with the names either of the several committees or competitors, we cannot trust our memory to report them. We can only say we felt a little envy of the gentlemen who carried out of the room the brilliant trophies of their honorable success; and could not but imagine the charming and complimentary reception they might expect at their own domiciles, with such dazzling bribes in their hands.

There was exhibited likewise, a most excellent and beautiful article of household manufacture, in a lady's bonnet, made of Manila grass. Its fineness was not surpassed by anything of the kind we have ever seen. The Society voted to the fair artist a complimentary gratuity of five dollars. This was certainly well. One gentleman, a bachelor we believe, and there was certainly strong internal evidence of the fact, commended the article, among other excellencies for its durability. "It was not a flimsy thing which would bear the wear only of a season, but was likely to endure for years." Just as though this would recommend it to our fair city ladies, or even to the farmers' daughters of one of our most secluded hamlets. Alas! how little does he know of female taste, when unless it goes by Harden's express, it is not certain that you could send a bonnet from New York to Buffalo before the fashion would be changed. One would suppose that this gentleman had just descended from one of the mountainous cantons in Switzerland, where the same woolen tiara and the same quilted petticoat go down to daughters and grand daughters,

and a pair of wooden-shoes lasts through several generations.

The report of the Treasurer was received with much applause, announcing as it did, so different a condition of things from most other treasuries of the day, in stating that the Society had remaining in its coffers, after all its debt were paid, a balance of 823 dollars for future operations. In this day of universal emptiness, when there is scarcely a bar-keeper or toll-gatherer, who does not report embezzlement, or over-issues, or suspension of payments, or necessity of a loan, or some new exchequer plan, or ask leave to issue treasury notes, this result produced such a shock as the assembly did not recover from for some time. For ourselves, we could only wonder where this green band of a treasurer could have lived in these days of financial discovery and improvement, and pray that no one would think of putting him into public life lest his good morals might be endangered. The great security is however, that the kind of tact, which he displayed, is not at all in demand just now. Promotion with such a man is well nigh hopeless.

The Report of the Corresponding Secretary was read, announcing that, in reply to his applications, he had received valuable communications from various distinguished gentlemen at home and abroad, for the volume of Transactions of the Society, now in a course of preparation for the press. His correspondence had been extensive and had met with a hearty response. Among others he had received a valuable communication from the Philippine Isles.

On motion of Mr. Randall of Cortland, a committee to nominate officers was raised; and it was devolved on this committee to designate the time and place for holding the next annual state fair.

On the report of the committee, the following gentlemen were elected officers for the ensuing year.

President.

JAS. S. WADSWORTH, of Livingston.

Vice Presidents.

- 1st dis. JEREMIAH JOHNSON, Kings.
- 2d do ROBERT DENNISON, Orange.
- 3d do ANTHONY VAN BERGEN, Green.
- 4th do JOHN SAVAGE, Washington.
- 5th do ORVILLE HUNGERFORD, Jefferson.
- 6th do GEO. I. PUMPELTY, Tioga.
- 7th do JOHN M. SHERWOOD, Cayuga.
- 8th do L. B. LANGWORTHY, Monroe.
- II. S. RANDALL, Cortland, Cor. Sec.
- LUTHER TUCKER, Albany, Rec. Sec.
- EZRA P. PRENTICE, Albany, Treasurer.

Executive Committee.

Alexander Walsh, George Vail, Henry D. Grove, Rensselaer; John M'D. McIntyre, and James L'Amoreux, Albany.

The committee recommended that the annual state fair be held at Albany on the 25th and 29th September next. This proposition was subsequently modified so as to read Albany or its vicinity.

On motion of Mr. Johnson of Oneida, a dynamometer was directed to be purchased, and it was recommended that the county societies each procure a similar one.

On motion of Mr. Clarke, the executive committee was directed to offer premiums of gold medals, or plate, or their equivalent in money, for the best essay on subjects to be selected by them.

On motion of Mr. Morrell, of Tompkins, the thanks of the society were voted to the Young Men's Association, for the use of their rooms.

The thanks of the society were voted to the officers of last year, and the meeting adjourned, to meet at the capital at 7 o'clock, P. M.

The Society having accomplished its business, met at the Capitol at 7 o'clock, where an address was delivered by Mr. Nott, the President of

the Society. The address was excellent in manner and matter, and received with universal satisfaction. We shall attempt a brief sketch of it, but it must be very imperfect excepting as concerns its topics. A copy was requested for publication; and in due time we hope to lay it before our readers from the author's own hand.

Many of the members of the Society and friends of Agriculture, in the evening, partook of an elegant supper at the City Hotel. The company were honored by the presence of the Governor and other guests. The evening passed off with much hilarity; and presented a beautiful demonstration, that when the benevolent and patriotic affections are kindled in a generous and noble cause, as much healthful heat and exhilaration can be manufactured out of the crystal spring of pure water as ever flowed from the colored waters of Madeira or the sparkling and gushing fountains of Burgundy, and this too, without leaving any scorching, or cinders, or smutiness behind.

The meeting was addressed in an effective, appropriate and agreeable manner by the President, the Governor, Gen. Leland, Alderman Joy of Albany, Judge Hungerford, Mr. Walsh, and other gentlemen, and broke up seasonably in good fellowship, and with a more quickened zeal and a more fixed determination in the great objects of their association. So mote it be!

But where are the broken glasses, and the up-turned tables, and the smutty toasts, and the ribald songs, and the profane jests, and the vile taunts, and the fiery resentments, and the folly and the emptiness, and the leadings home and the disturbed households, and the violent headaches, and the bitter mortifications, and the quickened appetites for further and more degrading excesses, which constituted once the usual accompaniments and appendix of such evening entertainments. Thank God, they are among the things that were! They will soon be looked upon only as the fictions of romance; and gentlemen will feel that the very mention of them, is an imputation upon their honor.

Mr. Nott's Address at the Meeting of the State Agricultural Society of New York in the Capitol at Albany, on Thursday evening, 19th January, 1842.

We subjoin an imperfect report of this excellent address from our own imperfect and hasty notes taken at the time, under many disadvantages. We have sought only to give the topics and the sentiments, but we may have been so unfortunate as even to have mistaken or omitted these. In this naked condition Mr. Nott may not be able to recognize his own offspring; and we shall not charge it upon him if he does not choose to acknowledge it. Presently we may be so fortunate as to receive it in its full dress from his own brilliant wardrobe and perfumed toilet.

Mr. Nott commenced his address by stating that the First Meeting of the Agricultural Society of the State of New York awakened a strong interest and excited sanguine hopes of its ultimate success. But year after year, a small but gallant band of the friends of improved agriculture had nothing to cheer them. They were compelled to struggle with many difficulties; but like chosen men placed upon the storm hope they were determined to triumph. There is a moral power in such a resolution, before which, ordinary obstacles at once retire. Their efforts have been successful. They are cheered with an actual and glorious triumph; and their path onward, is brightened with the confident hope of continued and extended successes. At one time they had neither the aid of the government nor the inspiring favor of the people. But circumstances have changed. The Legislature have extended a helping hand; and the people urge them onward by acclamation.

The great Fair at Syracuse, held in the last autumn,

was an unusual but a successful experiment. It much exceeded the expectations of its friends, in the animals which filled its pens, in the improved implements of husbandry exhibited for the inspection of farmers, and especially in the large collection of intelligent men, practical tillers of the soil, enlightened friends of agricultural improvement, collected there from all parts of the State, and in the presence of distinguished friends of agriculture from other parts of the country. Much credit is due to the moral courage of the gentlemen who undertook and so nobly effected this pioneer movement; much to the Government, who patronised the enterprise, and much to those high-minded individuals, who, in determining the place of meeting, yielded all personal and local claims; and to those friends of the cause in the vicinity, who contributed efficient aid to the successful accomplishment of the project. Every event which serves to elevate the condition of the industrial classes; every circumstance which strengthens our attachment to the soil; whatever contributes to increase and unfold the means of human subsistence and comfort, are of great moment. Shall a career commenced under such favorable auspices proceed? or shall it come to an unfavorable termination?

The first Agricultural Society in the State was formed by the patriots of the Revolution. They were wise men. Where have been found men more wise? We may be unconscious of our obligations, but we owe them a heavy debt of gratitude. The history of their efforts to promote the improvement of the agriculture of the State, forms a brilliant chapter in its history. The second Agricultural Society, formed in 1818, was not much better known, but its labors were highly valuable and important. They have passed away. Shall the Society of 1841 follow in their train? Our aim should be to render our labors not only brilliant but abiding. It remains to be seen how far the standing of its members will give it a moral influence. Our associates are in general from private life. As yet none of the Government have lent their aid to us; few of our legislators; and comparatively none from the learned professions.

Must agricultural societies fail? Is there within them an inherent principle of dissolution? Other societies flourish from age to age. Why should agricultural societies be debared from a like immortality? Are we earth-born or character? Something must depend upon the character of the people among whom these societies are established. If the people cannot be made to take an interest in them, and to perceive their utility and the advantages to accrue from them, they must decline. In some places they have been sustained. The seed has not always perished in the ground. The Highland Society of Scotland has continued to flourish for a long period. The Berkshire Society in Massachusetts wears a green old age. The people of the districts in which these societies exist, are remarkable for their agricultural thrift and skill. Is the duration of these societies attributable to some peculiar excellence in their management?

Our societies have never reached the multitude. The present English Agricultural Society is a brilliant institution, formed on the model of the Highland Society of Scotland. Shall we concede to Berkshire superiority of intellect? We have not failed through deficiency of knowledge. The eminent success of these pattern societies is worthy of observation. Agricultural fairs have become interwoven with the habits and customs of the people. Men of business have looked forward to them to favor their operations. Men of leisure have expected their coming as a charming holiday and a delightful recreation. Age seeks them to renew the recollection of youthful labors and sports. Youth welcomes them with all its natural enthusiasm. The ploughman alone in his work, pleases

his imagination with the hope of a premium. The hind anticipates with an honest pride, the applauded exhibition of his cattle. Our path is indicated by experience. Men, from whom better things were to have been expected, have hitherto withheld their aid. The success of the Cattle Show at Syracuse has compelled an acknowledgment of their error. We must hold an annual Cattle Show. We must augment the amount and the number of our premiums. We must open the competition to all classes; the poor as well as the rich; the humble woman, who may choose to contend for your prizes by any exhibition of her household or rural skill and industry, as well as the rich capitalist; the humble laborer, as well as the great proprietor. We must encourage and stimulate every branch of domestic and rural labor.

Our treasury is not empty but our purposes require at least a thousand subscribers. Our list does not contain half that number, and of this half, not more than two thirds pay their annual assessment. It is supposed that if the conditions of membership were enhanced, the funds of the society would be increased; but the terms should never be beyond the ability of the humble laborer.

One officer of the Society should be a salaried officer, on whom many active duties would necessarily devolve. It deserves inquiry, what would be the effect of the establishment of a Board of Agriculture, the members of which should be expected to pay liberally to the funds of the society. There are men among us willing to serve every public cause. The temperance cause does not stand in need of bold advocates and indefatigable leaders. The Young Men's Association, whose objects are mutual improvement and the diffusion of knowledge, find those who are prompt to lend their aid. Such men should be made acquainted with the generous and public-spirited objects of our Society.

In all our villages, literary and scientific associations have been established. They have enlisted the best talents to be found, in the advancement of their objects. Men of all descriptions, philosophers and poets have brought their contributions to these common fountains of instruction. This constitutes a popular university and renders knowledge every where accessible. It is to be feared that the farmer is behind hand; he does not do justice to himself, and other classes distance him in the race of improvement. We should seek especially to secure to the farmers opportunities and means for becoming acquainted with the principles of their own art.

If a board of agriculture should be established, its beneficial influences would be felt in the remotest valley of the state. Educated young men on leaving college find the learned professions crowded. They obtain only a very limited success; and must struggle with many difficulties in order to make their way. We find young men of all political creeds, ready to abandon their pursuits and seek political preferment. This is a thorny path. To those who make political success a matter of profit or loss, we can point out a field where gain is far more certain. We should reject the notion that knowledge and education are thrown away in farming. If the farmer is desirous of taking rank with the highest in the community, it will not be difficult to accomplish this honorable ambition; and education will give dignity to his calling.

It is not inconsistent with the character of a farmer to be a man of taste. "Man made the town, God made the country." There is no reason why ornamental farming should not be cultivated; and it is not inconsistent with the highest regard to profit, to embellish our grounds and our habitations, and to render our homes as beautiful as a simple and most refined taste can make them. If these high accomplishments of taste and mental cultivation can render no

service and are unfitting to an improved agriculture, then, as Cheever remarks, God cannot appear as an architect of practical wisdom, since his sky and earth are every where robed in beauty. Every object around discloses in its exquisite formation, the goodness and glory of God; and the meaneat flower gives thoughts too deep for utterance.

The agricultural life may be incompatible with the highest pursuits of science; these require the exclusive devotion of the life; for in this, as in all other cases, he who would woo the muses must bid farewell to professional eminence. But there are many practical farmers as there are practical men in all other departments of life, who have distinguished themselves in knowledge and literature. Thompson and Cowper have sung the charms of rural life. How powerfully are rural pursuits adapted to awaken a strong interest. The pastoral life has been always deemed favorable to high and religious conceptions. One shepherd has poured forth his soul in the holiest and loftiest strains, "When I consider the heavens the work of thy fingers, the sun and moon, which thou hast ordained, what is man that thou art mindful of him, and the son of man that thou visitest him."

Agriculture presents no impediment to the cultivation of science and literature. The pursuit of agriculture has been too often deemed degrading. Johnson, in a tone of disdain, says of one "that his talk was of beehives." This was unworthy of him, and inconsistent with his notions of utility. The scale of rank, by which the pursuits of life have been graduated, was formed in times of war and in ages of ignorance. The pursuits of men no longer lead to war; but to fields covered with the gifts of Ceres and Pomona.

We should seek to disabuse the public mind of these unworthy prejudices. We should raise our profession to its proper dignity; nor allow a lawyer or merchant to think that he loses caste by becoming a farmer. There are impediments to so desirable a result. In other pursuits men are stimulated by the rewards of applause or fame. The successful farmer is beyond the reach of these motives. He gains no fame; there are no offices of honor exclusively for him. A Board of Agriculture should occupy the same position to the agricultural societies as the Board of Regents to the schools and places of education. These suggestions should have weight with those who discuss this question. The Society, as already observed, should have a paid agent. It should have agricultural rooms—it should lay the foundation of an agricultural museum and library. The foreign press is teeming with agricultural publications of an expensive character, which might prove of essential service to American Agriculture, but which are beyond the reach of most individual farmers. The American mechanic has done much by inventions for facilitating or improving labor, simple in their construction and excellent in their workmanship. Models of ingenious or improved agricultural implements, would furnish a store-house of invaluable instruction and benefit. Agricultural science and agricultural literature are sneered at by men, who suppose that a volume of veterinary medicine constitutes the whole of an agricultural library. The Edinburgh Quarterly Agricultural Review, one of the most able publications of the age, few men are competent to read understandingly; and few are capable of contributing an article worthy of its pages. It is singular that science should be deemed useless in agriculture, when it has availed so much in all other arts.

The union of science with art has given to it a gigantic power and consummate skill. It has been displayed in preparing dyes and in weaving a web of exquisite tissue. Art under the guidance of science presses forward into the ocean of discovery. If we would gauge the improvements of the arts in Europe,

we must compare their condition with the condition of the arts in China. Europeans found on their first visit to China, a state of high improvement in the arts. But while Europe has advanced with a most rapid improvement, China has made no progress since the Cape of Good Hope was doubled by Vasco da Gama.

It is said that science has not yet done for Agriculture all she ought. It is because science has not as yet had it in its power to do more. We may expect the best results from agricultural chemistry. Its sun has just risen. Its level beams promise great advantages. The labors of Liebig encourage the strongest hopes.

The agricultural movements already made, and those which are yet to be made, are not in advance of what should be. The progress of the United States in other things must contribute to the advancement of agriculture. The progress of agriculture is a test of the moral progress of society. In the savage state, there is no agriculture. In the semi-barbarous there is little. If you will show us fields cultivated and adorned, we will show you a people intelligent and refined. War is most unfriendly to agriculture, which is eminently one of the arts of peace. It was said that France had no literature; she had only books on war. Peace has remedied this defect. The same may be said of us. We have farmers but no agriculture. We trust a few years will place us, in this matter, in an advanced rank. If peace is preserved, agriculture must continue to advance among us. Why should agriculture remain stationary with us? The bible, that book of wisdom, speaks of a high state of agriculture as consequent upon a condition of peace. Should the prediction of the prophet be realized, the desert place will be glad, and the wilderness will blossom like the rose.

Mr. Nott concluded his address with congratulating the Society on the uninterrupted harmony which had prevailed in their meetings; and had shown itself so eminently in the choice of officers; and in the decision respecting the place of the next Fair, a subject on which a division had been feared. This singular unanimity had served only to cement their union. Relying on this union, it should prompt us to be more zealous in laboring in this good cause.

New York State Agricultural Society.

We have received through the politeness of Mr. Tucker, the Recording Secretary, the official report of the competitors for the premiums of the Society. We regret that our limits do not allow of the full insertion of these reports; but in abridging them we have sought to present the most important parts.

The Show of every thing but Butter, was small—Of Butter, twenty lots, from different parts of the State, amounting to over 2,600 lbs. were exhibited. Of Cheese, only six lots were presented, amounting, however, to about 2,900 lbs. There were but three competitors for the premiums on Wheat—five on Oats—two on Indian Corn—two on Buds—four on Potatoes—three on Rata Baga—two on Sugar Beets—one on Carrots.

REPORT ON ROOT CROPS.

The committee found themselves exceedingly embarrassed from the want of the formalities required by the rules of the Society, as well as by the want of evidence of the merits of the different applications.

The committee unanimously reject all applications for premiums on crops that have been estimated by measuring a few roots or other small portion of the acre required by the rules, and which have not the evidence of a correct survey.

Several descriptions of the soil, manure used, labor and other expenses incurred in the results stated, are so imperfect that it was impossible to arrive at the comparative merits of the crops, as to expense—which defects can be remedied another year, by having blank forms made public through the agricultural press—No man should be allowed to compete for premiums, who is not liberal and patriotic enough in the great first cause of national prosperity, to put himself in the way of procuring the necessary information.

Several of the rejected crops are meritorious, if the mere dictum of the growers was proof, and in several cases would have taken the first premiums, had these over-sights been avoided.

The committee think it an act of justice to mention the crop of ruta baga turnips of Mr. P. P. Root of Sweden, Monroe county, reported as producing 1,300 bushels per acre, at 60 lbs. weight per bushel; also the crops of Mr. George Shaffer of Wheatland, Monroe county, which purport to have produced 1,160 bushels of sugar beets and 603 1/2 bushels of carrots per acre, at 60 lbs. per bushel.

The committee award.
For potatoes—to Phineas Hardy of Le Roy, Jefferson co., first premium, for 472 bushels per acre, \$15.
To H. D. Grove of Hoosick, Rensselaer co. second premium, for 440 bushels per acre, \$8.

For ruta baga—to W. B. Ludlow of Claverack, Columbia co., first premium, for 1,625 1/2 bushels per acre, \$15.
To George Shaffer of Wheatland, Monroe co., second premium, for 552 bushels per acre, \$8.
For sugar beets—to S. B. Vail of Mount Laurel Farm, Columbia co., first premium, for 559 bushels per acre, at 60 lbs. per bushel, \$15.

(The Reports of the Committees of the New York State Agricultural Society are in type, but necessarily excluded this month for want of room.)

English and American Agriculture Compared.

MR. EDITOR.—To improve the condition of the cultivators of the soil, and increase the productiveness of the Earth—are objects well worthy the attention of the Philanthropist and Statesman, and it is highly gratifying to see the increasing interest that the ablest and best part of the community are taking in these pursuits. We in this country can and are deriving much benefit from the many and valuable improvements and useful experiments made in England. Yet in introducing them here it is very essential that we should at first test them on a small scale, and prove them thoroughly before we adopt them as our own; for there is so much difference in the situation of the Agriculturists, in the two countries, that what answers the one well, will not do for the other.

The length of the season for agricultural labor, the shortness and mildness of the winter, the low price of labor, the great value of land, and the high price of its products place the English farmer in very different circumstances from us here. Our inquiry must be, how can we cultivate so as to give us the greatest return for our labor.

There it is, how can they increase the products of the soil, regardless of the expense. I am fully aware that the farmers in this section run over too much ground for the labor they have to bestow upon it. Yet I am equally confident if we were to apply the labor and expense per acre that is generally done in England in cultivating, we should not be compensated, the crops would not pay the expense.

Here roots can be cultivated on a small scale to advantage, but never so extensively as in England. Our frequent droughts in summer, which cause so many failures of the crops, the severity of our winters which makes it necessary to secure them all from the frosts and the shortness of our autumns which allows so very little time for that business, all operate against the extensive cultivation of root-crops. How could the farmers in Western New-York manage to raise 50 or 60 acres of roots annually? Yet more than that ratio is profitably and easily cultivated in England. The horses which are considered to answer their purpose best, are not suitable for us; they generally keep two distinct breeds the one for the draft and the other for speed. Here it is very essential that we should unite both properties in the same animal.

Our Sheep husbandry too differs very essentially. There the great value of mutton and low price of wool make carcass the principal object, and the fleece but a minor consideration. Here the fleece is the principal value, and the carcass of little consequence.

There the primary object is to increase the size of the animal and aptness to fatten, here the value of the fleece. Yet I think it would be well for us to unite both properties in our sheep, viz: fleece and mutton.

In the breeding and feeding of neat cattle the difference between the two countries is yet greater. The certainty and ease with which they soon raise abundance of seed and food, the cheapness of labor, the great price of animals and high price of beef, make the heavy and fine breed of Durhams very profitable to the breeder, for it matters not what quantity of succulent food they consume, nor what amount of care they require—if they do but increase their weight the producer is remunerated. But it is very different with the husbandman here. The expense and difficulty in raising our roots compels us to use them sparingly; and the high price of labor will not allow us to bestow on them that care which these heavy and delicate animals require, and if we should, sell these animals for beef at the market value they are generally so low that they would not pay the expense.

The tough and hardy animal that can feed in a dry and often scanty pasture, and live on coarse forage is the most profitable one for us: Our neat stock have to consume our coarse forage and give us something for that which we cannot otherwise take to market.

Although we require hardy animals that can live without much expense. Yet I am confident that many, yes, very many of us do not pay that attention to them which we ought, even for profit, to say nothing of the cruelty of causing them to suffer severely from hunger and cold. The latter we can feed with the food we have to give, and the more comfortable that we can keep our stock the more profitable they will be to us.

Yours respectfully,

Wheatland, Mon. Co. 1842. W. GARBUTT.

We cannot say that we acquiesce in the doctrines above of our respected correspondent to any considerable extent. We have not however in this case time to enter into the wide field into which the discussion of this subject would lead us. At some future occasion, we should be happy to treat the various positions that he assumes. To labor and capital judiciously applied, there is reason to believe that agriculture among us affords a most ample reward and would justify a much more liberal application of them than now prevails, either in the culture of our soil, the production of root crops, or the rearing and maintaining the most improved and best live stock, which can be procured at home or abroad.

In the mean time, we hope some of our intelligent correspondents will enter upon the various important topics suggested in Mr. Garbutt's letter and give us the lessons of their experience and the rich fruits of their wisdom.

Silk Production.

We give with great pleasure the following amounts of silk produced the present season in Manheim, Lancaster Co., Pennsylvania, and communicated by Jno. M. Sumney, who, we hope, will let us hear from him again. Our friend complains that his 'beard' does not work well with the pen; but he may be satisfied that it works so well at the reel. The prospects of the silk culture are constantly growing better. It must succeed, and fully merit all reasonable expectations. We need not be impatient. The multicaulis fog will soon be off; and men will work by the clear light of day.

— Herr has raised and reeled 552 lbs. of Cocons.

Jno. M. Sumney has raised and reeled 524 lbs. of cocoons, and made 100 lbs. of silk.

— Carson has raised and reeled 183 lbs. of cocoons.

John Wisler has raised and reeled 364 lbs. of cocoons.

—Melinger has raised and reeled 150 lbs. of cocoons, and made 12 lbs. of silk.

—Duveth has raised and reeled 190 lbs. of cocoons.

—Shelly & Co. has raised and reeled 172 lbs. cocoons, and made 15½ lbs. of silk.

Many more have raised from 20 to 50 lbs. Mr. Umney adds, that he will warrant his silk to be not equal but much better than the best of Calcutta or alian silk, for quality and texture.

These, together with the facts stated by Dr. Deane, Greenfield, to be given in our next, and the reports from the Auburn penitentiary, with many others that have reached us, speak with an emphasis which must command attention.

The Constitution of Wyoming County Agricultural Society.

Recently formed, provides that their officers shall be located one in each town in the county.

Any person can become a member of this Society, by paying into the Treasury, fifty cents annually, and subscribing to this Constitution.

The funds of the Society shall be appropriated for the encouragement of Agriculture and the Mechanic arts.

OFFICERS OF THE SOCIETY.

For President,

J. C. FERRIS, of Middlebury.

For Vice Presidents,

PETER PATTERSON, Esq., of Perity,

EBENEZER P. BICK, of Sheldon,

C. O. SHEPARD, of China.

For Secretary,

ACOSTUS FRANK, of Warsaw.

For Treasurer,

TRUMAN LEWIS, of Orangeville.

For Directors,

Leverett Peck, of Bennington; Ezra Bishop, of Atca; Milo Warner, of Java; George B. Chase, of Astle; Uriah Johnson, of Covington; Christopher ost, of Gainesville; Daniel Wolcott, of Wetherseld.

The Society holds its annual meeting on the Tuesday succeeding the third Monday in October.

NOTICES OF NEW PUBLICATIONS.

NEW YORK STATE MECHANIC; under the direction of the New York State Mechanics Association. Published at ALBANY—weekly—by J. Munnell & Co.—at \$1.50 per annum—in advance. Eight pages quarto.

CENTRAL NEW YORK FARMER.—A monthly Journal devoted to Agriculture. ROSE, Onondaga Co. N. Y. Johnson and Comstock, Editors. Horace N. Hill, Proprietor. 50 cents per annum. 7 copies for \$3. 16 pages—8 vo.

EASTERN FARMER & JOURNAL OF NEWS.—Semi-monthly. Eight pages folio. Edited by Francis O. Smith. PORTLAND, Me. One dollar per annum.

THE BRITISH AMERICAN CULTIVATOR. TORONTO, Upper Canada. W. G. Edmundson, Editor. J. Eastman and W. G. Edmundson, Proprietors. One dollar per annum including postage. 16 pages qto.

UNITED STATES FARMER AND JOURNAL OF AMERICAN INSTITUTES.—Each number from 32 to 40 large octavo pages, illustrated with engravings. Price two dollars per annum in advance. S. Fleet, editor, assisted by S. Blydenburgh.

We welcome the above new co-laborers to the field and heartily wish them all the success they can desire for themselves. The field is white for the harvest; and the world is wide enough for us all. We have only to express our regret that so recently have they come to hand; and so recently have we ourselves come to hand, that we cannot pay our personal respects to each of them. We may have this pleasure

at some future time. We can say of all of them that their appearance is not fair only but respectable; and that they work wonderfully cheap. We hear continually that presently prices must come down. It is rather difficult to imagine how the prices of agricultural periodicals are to go down any farther. There is no getting below the bottom unless we kneel the bottom out. Where that will bring us, imagination does not venture to predict. The great consolation is that having got down, we need not live in continual fear of a further fall; and flat upon our backs, it can only be said of us that "we are looking up."

We welcome our old friend Fleet back again to the duties of "auld lang syne", and are rejoiced to find him still fleet and sound, wind and limb.

The old Pioneers in the cause, the American Farmer at Baltimore, and its early condutor, The New England Farmer in Boston, preserve a green old age, and hold the even tenor of their way. "Honor to the brave."

The Albany Cultivator is still in its power and undiminished abundance, pouring out its monthly floods of intelligence and wise and judicious counsel; and moving on like the breaking-up team of the prophet with its twelve yoke of oxen.

We are looking daily for a Family Visitor from the Granite Hills, radiating with intelligence far and wide like the reflections in a sunny day from its own White Summit; and burning with a warmth of zeal, which has made many a farmer in that region trickle, who never had his ice melted before.

Boston opens the year with a numerous family, and all healthy and hearty. The Boston Cultivator, under its intelligent editor, H. G. Merriam. The Farmer's Journal, edited with all the industry and experience of S. W. Cole, not unknown in the walks of agriculture. Add to these the Massachusetts Ploughman to which is united the Yankee Farmer, under the veteran Buckminster, full of practical lore, but who, unfortunate man! as we learn from the New England Farmer, does not yet know how to spell his own name, as he is quoted the Massachusetts Ploughman. We shall give him up, if he does not find out his mistake soon.

Then there are the spare hands, the Boston Courier and the Mercantile Journal always ready to lend a helping hand and able to do three days work in one. As to friend Sleeper's sound and useful agricultural address at Wethers, we had prepared a notice of it for this paper but it is necessarily excluded. A man so wide awake to all good interests should be called any thing but *Sleeper*.

We had prepared to speak of other agricultural contemporaries, equally demanding our respect; but it would be idle, for it seems like nought the trees in a thick forest.

Effects of Increased Duties.

We quote an article from the New York Evening Post, depicting in strong colors, the evils which must fall upon the silk manufacturers in Lyons, from the impost by our government of 20 per cent. upon imported silks. There is, it is to be presumed, no exaggerated coloring in this picture. The operatives in the silk manufactures both of France and England, and so also of China, are probably the worst paid and the worst fed of any class of laborers on the continent.

We may, we must, if we are men, feel for them. Every benevolent mind deeply compassionates their condition; but the care of them and their relief he long to their own government and not to us. The situation of few of the manufacturers of any description, on any part of the European continent is better. They are all worked excessively and fare most hardly. The wretchedness in England prevailing among many classes of manufacturers is extreme, and almost past relief. But how to remedy this, or even how to

alleviate it, is difficult to say. This is a problem for the solution of which the heart of the christian philanthropist aches with agony.

If all men were christians, and lived only and fully upon christian principles, if justice and the love of our neighbor prevailed every where, there would be little of this suffering. There would be no occasion for laws other than what would be dictated by every man's own heart and conscience. All penal enactments would be needless, and government would be felt by us only as the great law and power of gravitation are felt by us. But it is not so; and while the reigning spirit of christianity is universal love and universal equity, that of the world is universal selfishness and universal rapacity.

In such a condition of things, it seems idle to talk about free trade. There is not, nor is there likely to be, a civilized nation upon the earth where it exists; and for us to act upon a system of entire freedom of trade, would be only to crush our own industry, to arrest our own improvement, and to expose ourselves as helpless victims to the rapacity of other nations. If other nations were willing to receive the products of our industry without impost, we might then consent to admit theirs upon the same terms; but while they prohibit all competition with their labor, we should seek, in the same way, to protect and encourage ours. The only true independence of an individual or a nation, lies in its power to supply its own wants; and this it should constantly seek to do.

We cannot, in this case, enter upon the great and vexed subject of protection. It would be a charming picture, if we could see all the nations of the world engaged in a free and unrestricted exchange and interchange of their various products. But at present, such a thing can exist only in the benevolent imagination. In the present condition of society, nations are compelled to act upon the defensive, or suffer the bread to be taken from the mouths of their own children. The governments under which these unfortunate people live and suffer, are responsible for a great portion of the misery to which they are reduced; and for that system of bloody tyranny by which they compel them to stifle their complaints, and to die in the agonies of starvation and famine.

Our movement in this matter may produce extreme distress, but it is the duty of their own governments to all-viate their sufferings, or by timely provision prevent them. There is not a single objection to be urged against the encouragement of our own manufactures in this case, but what would apply with equal force to the invention of any kind of art or machinery by which labor may be abridged and transferred, and consequently vast numbers be thrown out of employment. In the end, however, all such improvements redound as much to the benefit of the laboring as of other classes. It would not be difficult to show that the consequences of the free introduction of foreign luxuries, foreign silks, gewgaws, and wines into our country, if it could be examined in all its various influences, has been productive of more suffering or evil in our country, than the imposition of duties upon such articles can produce in Lyons or other manufacturing towns in France or England.

From the N. Y. Evening Post.

The following passage occurs in a letter written at Paris, for the London Examiner:

"Alas! Paris, the greatest and most dangerous agglomeration of artisans is at Lyons, and thence must be much affected by the 20 per cent. increase of duty on silks imported into the United States, half the French export of silks going to that country. If to a thus diminished demand for work, and consequently no hope of a rise in wages, be added dear bread and increased taxation, Lyons may give some trouble during the ensuing year. The trouble, however, is now without danger to the Government, for Louis Philippe has taken care to surround and curb the town of Lyons

with a mass of stupendous fortifications which might defy Babylon itself in a state of insurrection. There is not a woe's garret at Lyons that has not a cannon's month's length down upon it, and all these most extensive fortifications are said, like those of Paris, to have been erected against the foreign enemy! and to dear bread and diminished exports is now to be added the burden of increased taxation.

Such are the relations between the countries in amity with each other, as it is called. The different governments of the world profess for each other, in their public documents, the most friendly sentiments; not a diplomatic note is written from one minister to another, that is not as full of goodwill as a Moravian sermon; yet their whole conduct towards each other is but a selfish struggle for advantages, without regard to the sufferings it may cause. In the midst of these mutual professions of just ice, kindness, and benevolence, one nation will, without any sort of scruple, adopt a measure which levels a deadly blow at the industry of another, and dooms a large portion of its hard-working inhabitants, the most helpless, as well as the most meritorious class, to starvation.

This is done with the utmost coldness and unconcern; nay it is made a matter of boast, if, in consequence of starvation of a few thousands in another country, it is thought that a remote possibility exists of enriching a few hundreds at home, and he who should speak of this as a wrong, or express any sympathy for those who are its victims, would be regarded by most men as a person of very superfine morality.

America, for example, levies duties on the silks of France, which throw the inhabitants of populous French cities out of employment. In all the discussions which have arisen upon the question, nobody we believe has thought this was of the subject worth the public attention. The great manner of doing to others as we would have them do to us, has not been thought worthy of quoting in a question affecting the interests of another nation. Every government, it is said, should take care of its own subjects. As the world is now governed, this is done. When the people grow fierce with hunger, the government shoot them down. When the looms, which you hear clashing in every street of populous Lyons, are stilled by the check which American laws have given to the exportation of silks, the starving weaver, to escape the cries of his children for whom he has no food, walks out into the streets, discomfited with the order of society, and meets with others as discontented as himself. If they talk of their sufferings too loudly, and with demonstrations of impatience, they are arrested by men in Louis Philippe's uniform; if this does not restore tranquility, there are the batteries of the enclosing fortifications ready to be opened upon them. What is the recipe of the British government for appeasing the tumults caused by the starvation of the British operatives? A detachment of the military, powder and ball. It is thus that governments take care of their subjects when the legislation of other countries leaves them without bread.

There is a numerous and respectable religious sect who bear their testimony against war, and peace societies have been formed all over our country, of which men of all denominations are members, including some of the greatest intellects of the age. Do not this sect and these societies, we have sometimes asked ourselves, mistake their true object, and have they not put the effect for the cause? Might not their exertions be better directed to do away that miserable contest of selfish legislation out of which spring so many misunderstandings as many mutual discontents, so many rooted prejudices, of which actual war is but the natural consequence?

If we bring famine upon the laborious classes in other countries, it matters little whether it is done by a statute or an invasion; it matters little whether we point against them the weapons of their own government or of our armies. The whole protective system, as it is called, is as much a system of mutual annoyance as a state of war; the evils it inflicts are certain, the benefits it brings are imaginary. It is a struggle between nations to do each other harm, to cut off the branches of life in luxury by which each other's population is fed, to exclude each other from the markets in which their industry meets its fair reward. It is a sleepless warfare upon each other's prosperity, as malignant almost as harmful as if it were carried on with the sensible array of war, with ordinance and batteries, with fleets and embattled hosts. Its effect is to destroy property, to annihilate capital, to frustrate enterprise, to depopulate cities, to bring sudden destitution upon whole provinces. The world will never enjoy durable peace until it ceases to be the general policy of nations.

On the Different Breeds of Sheep.

[CONCLUDED FROM OUR LAST.]

In describing the Merino sheep, it may be advisable, previous to tracing their spread over other parts of the world, to give some account of them as they are found in Spain, their native country.

I do not deem it at all essential, in doing this, to go far back into the history of the Saxons, older than to mention the history of the Moors, whose power has never been the theme of most writers; and the costliness of their costume has, at all times, been dilated upon in all the glowing terms of fable and romance.

The expulsions of the Saracens from Spain, destroyed, however, the woollen manufactures of that country; and we are told that Ferdinand the 5th banished nearly one hundred thousand industrious people, because they wore Moors.

Philip 3d, his successor, drove from Valencia one hundred and forty thousand of the Mohammedan inhabitants; and in the three following years six hundred thousand were expelled from Murcia, Seville, and Granada.

Notwithstanding the political changes of the country, the total loss of its manufactures, and the consequent neglect with which they were treated, the Merino sheep seem to have been perpetuated in all their purity.

The sheep of Spain are divided into two great classes—the Stationary and the Migratory.

The Stationary sheep are those which remain the whole year on one farm or district; while the Migratory, are those which are driven from one part of the country to another, periodically, in search of pasture.

The Stationary sheep are said to consist of two distinct breeds, and a third or intermediate one. The first is the *Chacal*, and is altogether different from the Merino, being the breed of the peasant and small proprietor. The other principal breed of Stationary sheep is, the *true Merino*—and the third, which are found in every part of Spain, are a various mixed breed, the produce of the two former—the value depending upon the amount of the Merino blood in them.

The Migratory, or those which are driven to the mountains in the summer, and to the plains in the south of Spain in the winter, are the description of sheep by so many countries have been enriched, and the character of which it is here attempted to explain. These, like the Stationary sheep, are divided into two classes, and are known as the *Leonesa*, and the *Soriana*, which names they take from the different parts of the mountains to which they are driven. It is not the intention, here, to trace the operations of the sheep-breeders of Spain, or to give any account of the semi-annual marches of these flocks, from one extremity of the Kingdom to the other;—though it is a subject well worthy the attention of the careful and judicious farmer, in as far as climate appears to be of the greatest importance. These two divisions of the Migratory sheep of Spain, viz: the *Leonesa* and *Soriana*, are again divided into particular breeds, as the *Escorial*, *Gaudeloupe*, *Puñalar*, *Infantados*, and *Negretti*—the last being the largest and strongest of all the Spanish travelling sheep.

The general impression made by the Merino sheep, upon persons unacquainted with them, would be unfavorable;—the legs being long, though small in the knee; the breast and back narrow; the sides somewhat flat; the shoulders and humps heavy; and a considerable portion of their weight, carried on their carcase parts. Both male and female have a large tuft of hair growing on the forehead and cheeks, which should be always cut away previous to shearing; they have an extraordinary looseness of skin under the neck, which gives them a *throatiness*, which, in England, is looked upon as a bad property, while in Spain it is the very reverse, and esteemed as denoting a tendency both to wool and to a heavy fleece. Such throatiness is said to be characteristic of no aptitude to fatten; and this appears to be a matter not considered of sufficient importance to call attention, the fleece being the only object.

In following the importations of the Merino into England, which took place under the immediate patronage of George the 3d, it is hardly necessary to give any account of the first lot of sheep which arrived in that country. They were picked up without that attention to selection, which forms so important an essential, and consequently fell very short of the expectation which had been raised upon them. An application was then made, directly to the Spanish government, for permission to purchase a small flock; and consent having been obtained, a limited number were collected, of the *Negretti* breed, and shipped to England in 1781. The product of the second and third

shearings was compared with the best sample of imported Spanish wool, and it yielded not to them in any of the properties of fineness or felting. The same comparison was kept up for many years, with equally satisfactory results; and many of the most spirited breeders experimented upon the effects of crossing up on the various native breeds of England, reporting the result. There appears to have been a prejudiced form of resistance then; and it was thirty years after the arrival of the *Negretti* flock, before it was thought prudent to expose any of them to public sale. It was not my intention to detail the Merino mania which followed; it is enough to mention that a society was established, with Sir Joseph Banks as its President, with fifty-four Vice Presidents, and local committees in every county in England, Scotland, Wales, and Ireland; expensive premiums were awarded, or every inducement offered to persuade the farmer generally to give the preference to this breed of sheep. Their decay in the public estimation, however, became as rapid and as extensive, as their value on the other hand had been overrated, and that for the most simple of all reasons. The British people are susceptible of other peculiarities, especially *eters of nation*, and to satisfy their tastes, every thing has been overlooked to produce a sheep for the butcher; and in this respect the Merino is entirely deficient. The carcase did not afford a remuneratory price, and they were consequently abandoned. Again, the British shew wools, that is, the *Southdowns*, &c. though not in use for the finest of broadcloths, are equally valuable in their respective departments of manufacture; while the carcase fetches the highest price with the grocer &c. These two circumstances combined, produce the farmer a more certain, and, on the whole, a better remuneration than can possibly be gained by breeding the Merino. They are, notwithstanding, a fine valuable breed of sheep, and yield a wool which, for fineness and felting properties, is unequalled; and, though literally given up in England, the *Anglo-Merino* may occasionally be found in high perfection. *Lo Western*, their special patron, has paid every attention to them and has considerably improved his flock by a cross of the Saxony-Merino upon the original importation to England. This has been likewise the case with other breeders, not only in England, but Ireland also, where they are said to have improved rather than deteriorated.

The importation of the Merino into Saxony, took place in 1765; the Elector purchasing one hundred rams and two hundred ewes, of the most improved Spanish flocks, and placing them on one of his own farms, near Dresden. The prejudice against invasion was strong, and the greatest difficulty prevailed in inducing the sheep masters to make any allusion in the systems which they had imbibed. The Elector, however, having assured himself that it could be naturalized without any deterioration in the quality of wool, took measures to carry out his view which seem unworthily so good a cause—he compelled those who occupied land under him, to buy a certain number of Merino sheep. This compulsory system was happily of short duration; the farmers generally were brought to see their own interest; the naturalization of the Merino in Saxony was perfected; it bred rapidly increased; and after a few years a fleece of the Saxony-Merino became superior in fineness and manufacturing properties, to that of a Spanish.

One of the greatest causes, however, to the production of such results, was *education*. The Elector aware that nothing could be done where ignorance prevailed, took the true and legitimate method of moving this obstacle; and under the auspices of a government of Saxony, AN AGRICULTURAL SCHOOL and other minor schools, for shepherds, were established; and publications, which plainly and intelligibly explained the real value and proper management not only of the Merino sheep, but of every other description of domestic live-stock, were distributed. To full effect implementation of his purpose, was the Elector; and he had the gratification of knowing, that by this enlightened policy, he had assisted materially in forming the foundation of the wealth and the happiness of his country.

It is impossible to pass over this example, without calling the attention of the farmers of America, the most important of all subjects now agitating the minds of the reflective part of the agricultural population—I allude to the *National Agricultural Association*. Such results as those which have taken place in Saxony, must necessarily follow a similar eye in this country; and it behooves every man, who has the least particle of patriotism in his blood, to stand forward at this time, and give the necessary assistance to this great National undertaking. No man who

consider himself of not sufficient importance, to make himself especially a party to the work. There is no man or child in the whole community, whose interest not completely wound up in its being fully carried out—and no one can stand aloof, without being asured, that he is recreant to the interests of his family, and to the prosperity and independence of his country. Every man may do a little—merely talking up the subject, will go a long way towards its sure establishment; the attention once led to it, its advantages must necessarily present themselves to view; and every man, be his present opinions what they may, by *reiteration*, must necessarily prove himself a friend of the cause. But enough—the matter is in better and more efficient hands.

I will now make some few observations on the *Memo* sheep in New South Wales. The climate of the country seems better adapted to sheep, than any other I discovered on the globe; and from all accounts appears to operate so decidedly, as to be an exception to the fundamental principle, of the *paramount influence of blood*—no sheep have been imported into that country, without the most rapid improvement immediately taking place, not only in the roundness and compactness of body, but in the fineness and length of the fleece.

The history of the introduction of the Merino into this country, I will leave for the subject of my next essay.

Lonely but Good Advice to Readers and Editor.

Whoever reads the annexed article, will not be surprised that we publish it. As far as our readers are concerned, we shall not intrude upon their province and say that they ought to follow this counsel. It is quite enough to receive advice at first hands, without, what grammarians call a *republication*, and being advised to take advice. But for ourselves, we at once agree to our friend's proposition, that we should have a regular correspondent in every town, not only in the state, but in every town where our paper has the honor of being admitted, to whom we should send two copies; and who would, in return, agree to assist the circulation, and especially to furnish valuable information for its columns. But with a limited acquaintance, how shall we effect this, unless the friends of the cause volunteer? We hope they will do this in the spirit of our respected correspondent, and we promise to meet them full halfway.

It is said that on a certain occasion, a minister having named his text, "Who will go up with us to Ramoth Gilead to battle?" and repeating it once or twice with considerable emphasis, a sailor in the assembly, much vexed with the silence and apathy of the congregation, rose at once, and said with considerable feeling, that "if there was nobody else to go, he would go for one." Now having announced our text to our brother farmers, we hope we may find a good many all over the country, who will follow this brave fellow's example. It is in vain for the lead horse or the filly horse to think of drawing the load alone. Let us pull together.

Mr. Editor—I want every farmer in Western New York to become a subscriber for the *New Genesee Farmer*, and not only a subscriber, but also a constant reader. Brother farmers, who are now readers, what do you say, shall we bring this about? Yes we;—you reader, and I and all the rest of us;—I am quite sure we can do it. Come, let us all put our shoulders to the wheel and try! But how? I will tell you. Every one of you, when you get through reading this communication, take this number of the *Farmer* in your pocket, go through your neighborhood and call upon every man to subscribe. Talk to him "like a book." Tell him how much you have been interested by the perusal of it; and how great the advantages that will result to him if he will only take it—even for one year—one cent a week is all it costs,

and the money will never be missed from his purse. Come brother, subscriber, let us "put in" once, and see what the result will be. Let us count up, there are 20,000 of us now; well, I will agree to procure five, each of you will do the same, this will make 100,000; here we will rest our labours for the present, and if our new Editor "does the fair thing" this year, and "the old folks" conclude to let him stay, why next year we will double the list, that's all. I feel quite confident the *New Genesee Farmer* may be made to take a high rank among the agricultural papers of the United States, and that it will be conducted in a manner deserving of as extended a circulation as we can give to it.

But, Mr. Editor, I have said sufficient to your subscribers, now I have a plan to suggest for your consideration, which I think will not only add interest and usefulness to your paper, but also greatly increase the number of your subscribers. I propose that you appoint a regular correspondent in each town in Western New York, send him two copies of the *Farmer*, one for himself the other to be loaned or circulated by him to such farmers in his town as may not be subscribers, to be returned to the correspondent when read, and by him again loaned to some other person, and so proceed until every farmer in town shall at least have read one number annually. I cannot but think, that this plan would awaken a more general interest in the farming community towards agricultural papers, and have a tendency to do away a deep-rooted prejudice which still exists among some of our most respectable farmers, against what is called "book farming." It would bring your paper to the notice of hundreds, yea thousands, who now know not that such a paper is published, and add many names to your list, which, except by this means, would never have been found there.

It will be the duty of the correspondent also, to report for your columns, accounts of extraordinary crops, animals, &c., and all matters he may think worth recording, and after the harvesting of each variety of produce, a brief report of the amount of the crop upon an average through the town.

I have several other things to say to you Mr. Editor, but lest my communication should take up too much of your space, or be passed over by the reader on account of its length, I shall refrain.

J. HORSFIELD.

Castile, Wyoming Co., N. Y.

Making Butter.

From a lady correspondent we have the following method of making butter, by first scalding the milk. The mode is sometimes called the Russian, sometimes the Scotch, and sometimes the English. It may just as well be called the American mode, for it has been long practised among us. Twenty-six years ago we saw it in full practice in a dairy of a hundred cows, on the farm of Robert Smith, near Baltimore. It has much to recommend it, and especially from the sweetness of the cream, the milk not standing more than twenty-four hours, or it may be twelve hours; from the ease and quickness with which the butter was usually brought, the churning seldom requiring but few minutes; and lastly, from the improved quality of the skimmed milk, which by being heated, was thickened and made richer; and in the case above referred to, brought three cents a quart at the entrance of the city, where it was sold to a retail dealer.

Mr. Editor—As there are many different ways of making butter, and each has its advocates and its opposers, I have thought the following would be of some service. It is copied from an old English work. "The milk, instead of being put into earthen pans, as with us, is poured into copper or

brass pans, well tinned, and after standing a certain time, these pans are placed on stoves heated by charcoal. The heat causes the cream to rise in a few minutes to the surface of the milk in a thick consistency, called clotted cream. When it has remained a certain time on the stove, and has sufficiently warmed, it is returned into the dairy, and as soon as cold, the clotted cream is skimmed off, put into a large earthen bowl, and by the slight movement with the hands or a wooden spatula, is almost instantaneously converted into butter. Very little buttermilk of course, is pressed from the cream thus prepared, and what is, is remarkably rich." Almost every one has noticed that when milk is boiled, there is a scum rises upon it, and also that it has a very delicious taste. This method is certainly well worthy of a trial. HANNAH.

Farmer's Winter Memoranda.

The winter is now somewhat far spent, and farmers who wish to be well prepared for the coming of spring and its hundred labors, must improve the time in making the following preparations; viz:—

REPAIR ALL YOUR TOOLS.

Rakes, for horse and hand, should have broken teeth supplied;

Hoes, should be good, sharp, and have good handles;

Forks, do. do.

Ploughs—the wood should be sound, and the shares good;

Harrows, cultivators, rollers, should all be put in good condition;

Carts and wagons prepared for use;

Harness well repaired and oiled, and

Horses kept in good order to wear it when the time comes, by good, regular, and careful feeding.

SEEDS of all kinds should now be obtained, clover, barley, corn, oats, &c., and of root crops, as beets, carrots, turnips; and don't forget the garden seeds.

GRAFTS of fine fruit may be procured; every man should endeavor to add something each year to his stock, (as *fruit stocks* and *farm stock*, are the best kind of *stocks* a farmer can speculate in,) if he only spends half a day for the purpose in each year.

Grafting plants may be now made—use 8 parts resin, 4 of beeswax, and 3 of tallow, melted and spread on old cotton, or paper, to be warmed over a kettle of coals before applied.

Trim apple trees—old bearing trees—that have thick branches; and prune hardy grape vines; so that they may not grow so dense, and have finer fruit. And don't forget to tread round young fruit trees, when deep snow falls, to exclude the mice.

Repair fences, where practicable, especially where the boards have been loosened from the posts; and observe the same towards gates.

Fuel—get plenty and cut up for summer use;

Manure—manufacture as much as you can, now, this winter; and procure

Plaster, for early spring sowing. J. J. T.

Important Suggestion, at this time of the year.

According to Liebig, (and the evidence of our senses, too,) a large portion of the valuable part of manure, escapes from stables and other places of collection, in the form of gaseous ammonia. Now by strewing the floors of stables with gypsum, this gaseous manure immediately combines with the sulphuric acid of the gypsum, forming a solid compound, destitute of smell, and of great value as manure. The offensive odor is destroyed and the manure is retained. Those who have tight stables may successfully try this with great ease. J. J. T.

Importance of the quality of the Salt used in making Butter.

At a late Agricultural meeting in Augusta Me., Dr. Bates stated that the Quakers in Fairfield were in the habit of buying the best description of coarse salt and cleansing it, and having it ground, and this salt they used in the manufacture of butter. The consequence was the butter made by the Quakers of Fairfield, had a better reputation and bore a higher price than the butter made in other towns. He held them up as worthy of imitation. He stated that the loss of the butter manufactured in this State was greater in amount every year than the sum raised for the State tax—more than four hundred thousand dollars. He believed that, if this fact was generally understood, if the people could be made aware of the loss incurred by bad manufacture, we should at once see an improvement in this article of which is so much produced and which enter into our daily consumption.—*Maine Farmer.*

Hung or Brined Beef.

The recipe of a successful turner, is as follows:
Eight oz. of salt, 1 made into
Two oz. of salt-water, 1 brine.

This quantity, to be applied to ten lbs. of beef. It should be in the brine four weeks; and then be hung up in the kitchen to dry. In summer to preserve it from insects, it should be tied up in a linen cloth.

YEAST.—Boil one pound of good flour, a quarter of a pound of brown sugar, and a little salt, in two gallons of water for an hour; let it afterwards stand until it becomes milk warm, bottle it and cork it close. It will be fit for use in twenty-four hours. One pint of this will make eighteen pounds of bread.—[*Lady's Annual Reg.*]

The officer caplets are shaken, the longer they wear; the dirt that collects under them, grinds the threads.

See that the beef and pork are always under brine; and that the brine is sweet and clean.

Agents for the New Genesee Farmer.

In addition to the numerous Postmasters and other friends of Agriculture who have kindly aided the Circulation of this paper, the following persons will receive Subscriptions in their different towns and cities
Baton, Mass. Messrs Little and Brown; Ruggles

Norras and Mason; Hovey & Co.

Newburyport, Mass. J. Colman,

Worcester " Clarendon Harris,

Lowell, " D. B. Ely,

Salem, " John M. Ives; Francis Putnam,

Greenfield, " James Deane,

Lynn, " Charles Coolidge,

Danvers, " S. Proctor,

Portsmouth, N. H. Nath'l March,

Providence, R. I. Hiram Fuller,

Hartford, Ct. E. W. Bull,

New York, Thos Foster,

Albany, Wm. Thorburn,

Utica, J. E. Warner,

Syracuse, T. B. Fitch, & Co.

Auburn, T. M. Hunt,

Buffalo, W. & G. Bryant,

Toronto, Canada, Lyman Farr & Co.

Hamilton, " Samuel Kerr,

Brantford " John Curries,

Kingston, " J. W. Brent; John Creighton.

A Wherryman Wanted, in Ohio.

I, the proprietor of a well established and favorably situated Nursery Garden at Columbus, Ohio, wishes to engage a man of some experience in the business, to take the management of the establishment, either as a partner, or as salary. Address, if by letter post-paid.

J. A. LAZELL.

Columbus, Ohio, Feb. 1, 1842.

CLOVER AND TIMOTHY SEED.

OF the best quality, free from bad seeds. For sale at the Seed Store.

M. B. BATEMAN.

GREAT SALE OF BLOODED STOCK.

I propose to sell by Public Auction, on Tuesday 29th of March, at my farm in Greece, adjoining the Erie Canal, six miles west of Rochester, all my blooded and grade stock, including my choice Durham Cattle, Horses, Leicester Grey and Hags, the remainder of which, with pedigrees of the same, will be given at a future day.

THOS WEDDLE.

Rochester, Jan. 25, 1842

Rochester Seed Store and Agricultural Repository.

THE proprietor of this establishment, would now inform his friends, that having relinquished the charge of the New Genesee Farmer, (to add laborers,) he will hereafter devote his whole attention to the business of the Store, confident that he will thereby give increased satisfaction to his customers. A full supply of nearly all kinds of SEEDS are now on hand for the ensuing season; a part of them raised in this vicinity the past season, by C. F. CROSBY, and other careful seed-growers, and the rest obtained from the most respectable foreign sources. Knowing that success in agriculture must depend on the quality of the seed, we wish to have it served out what they should be of the right kinds and the best quality.

OF AGRICULTURAL IMPLEMENTS, GARDEN TOOLS, BUCKS, &c., there is good stock on hand, but many more will be obtained in the spring, when it is intended to enlarge the establishment so as to allow more room for this class of articles.

MERCHANTS will be supplied with seeds for retailing, at very low prices. The usual number of Agents will receive assortments on commission as heretofore, during the winter.

Our CATALOGUES will be furnished soon.
Rochester, Feb. 1st, 1842. M. B. BATEMAN.

FRUIT TREES.

THE subscriber is now and will continue to furnish in large or small quantities, the finest varieties of Fruit Trees, Flowering Shrubs, Herbaceous plants, Bulbous Flower roots, Double Dahlias, Green house plants, &c. &c. Also, C. F. CROSBY, of Rochester, N. Y., has put up in boxes or packages to order; all of which are warranted genuine as represented, and of superior quality.

Orders for the Spring will be promptly attended to on very liberal terms, when accompanied with cash or satisfactory references.

Selections will be made by the proprietor, when requested.
Rochester, Feb. 1st, 1842. C. F. CROSBY.

THE NEW GENESEE FARMER, AND GARDENER'S JOURNAL.

VOLUME THREE—FOR 1842.

THE Cheapest Agricultural paper in the country.—6 Large Pages Monthly, (with engravings.) only 50 cents per year.

HENRY COLMAN, EDITOR.

(Late Agricultural Commissioner of the State of Massachusetts, and Editor of the New York Farmer.)

Grateful for the extensive patronage which the New Genesee Farmer has received during the past year, the proprietor now has the satisfaction of announcing that he has made such arrangements for continuing year as cannot fail to be highly gratifying to the readers of the paper, and secure for it a still more extensive circulation.

Desiring to make it the most useful and widely circulating agricultural paper in the Union, the proprietor has engaged the services of the celebrated and eminent agricultural writer and orator, HENRY COLMAN, well known as the late Agricultural Commissioner of the State of Massachusetts, and formerly editor of the New England Farmer. Depending on the co-operation and support of the friends of agriculture in the Empire State and the Great West, Mr. Colman has consented to leave his native land, and has labored with so much honor and success, and located at Rochester, where, through the medium of the Genesee Farmer, he expects to find a more extensive field of usefulness.

Post Masters and their Associates are authorized and respectfully solicited to act as Agents and remit subscriptions for the Farmer. The low price at which it is published will not allow of much pecuniary compensation to Agents, but it is believed they will be induced to bestow the patronage which result from the circulation of such periodicals in their neighborhoods.

Persons ordering papers are requested to strictly observe the Agents, and be careful to write & please the names of subscribers, their Post Office, County, and State; and in all cases to send the money with the order, so that the perplexity of keeping accounts may be avoided.

M. B. BATEMAN, Proprietor.

TERMS.—If current money is sent (such as New York or New England bills) commission will be allowed as follows:

Seven copies, for \$5.00 Payment advanced to be Twelve do. for 5.00 made in advance to be Twenty-five do. for 10.00

No commission will be allowed if current money is sent.

Address, BATEMAN & COLMAN.

December 1, 1841. Rochester, N. Y.

NEW CUSTOM MILL.—The subscriber having taken the White Mill on Water Street, East side of the river for the purpose of running it as a Custom Mill would give to all who will be now prepared to do work as short a time and as well as he ever has in New York State. He has the facilities and a close application to business, he is in hopes of merit and obtaining a share of public patronage.

Wheat, Rye, and Corn, all kinds of Wheat, all Barley, Beans, Oats, Peas, Grass Seed, Flax Seed, Buckwheat, Rice Wax and dried Fruit: for which the highest market price will be paid.

N. B. Flour will be at all times on hand, subject to the most reasonable terms for merchants or others who wish grain ground.

W. C. FOSTER.

Rochester, January 1, 1842. 3m

A FINE FARM FOR SALE.—Of fifty acres of choice land, situated about 1 and a half miles from the centre of the flourishing city of Rochester, N. Y. on the south-east end of the lot, from Monroe street, and within a mile from the city line. A new house, barn, and fences—a fine orchard, good wood and water, &c.

For further particulars, enquire on the premises, or address C. W. C. to Rochester Post Office, N. Y. Postpaid.

Rochester, Dec. 25th, 1841.

MILLIS'S ROOT CUTTER.

Having for several years past had numerous inquiries from those who are desirous of procuring a machine for cutting vegetables for feeding stock, and the satisfaction of the public, the subscriber has been enabled to procure some that just the thing wanted. The following recommendation C. N. BENTON has published in the Albany Cultivator, clearly sets forth the advantages of the Machine.

"As much attention has been paid of late to the culture of roots for feeding stock, &c. At first some difficulty occurred in getting the roots cut in the best manner, the subject labor to a machine. Where a large stock were fed, much time and labor was spent in slicing or cutting the roots suitable for feeding with safety. At first the spade, sickle, a chisel were brought into requisition, but not satisfactory. Other machines have since been used, such as the Grater, horizontal Knives, operated by a team. But Millis's Vegetable Cutter eclipses the whole. It consists of a box, seven long, 2 feet wide, 18 1/2 high, with a hopper and a receiver or spout below. Near the centre of the box is a frame bearing a circular plate of cast iron on a horizontal axis to which a crank is attached, the wheel carries three knives set parallel to the face of the plate and radiating from the centre, the vegetable presses against the knife and their own weight keeps them within the stroke of the knives.

They will cut more potatoes into thin slices in one hour than a man can cut in two days with a knife. I find that Vegetables cut in this machine, will not rot in a mud t barrel, making a great saving of space. I have cut 200 lb. of chine cuts potatoes, turnips, beets, cabbage stumps, pumpkins and squashes, when broken, with ease. The above given to answer the many enquiries made, which it is believed will be highly satisfactory for the sake of the vegetable garden for feeding stock. C. N. BENTON.

For sale at the Rochester Seed Store—Price \$10.
Jan. 1st, 1842. M. B. BATEMAN.

ROCHESTER PRICES CURRENT.

(CORRECTED FOR

THE NEW GENESEE FARMER, FEBRUARY 1, 1842			
WHEAT,	per bushel,	\$ 1.06	\$ 1.00
CORN,	"	44	41
OATS,	"	28	31
BARLEY,	"	44	50
RYE,	"	53	56
BEANS, White,	"	62 1/2	75
POTATOES,	"	25	26
APPLES, Dessert,	"	25	32
FLOUR, Superfine, per bbl.	"	5.00	5.25
" Fine,	"	4.50	
SALT,	"	1.38	
PORK, Mess.,	"	8.00	
" Prime,	"	7.00	
" per 100 lbs.	"	2.75	3.00
BEEF,	" per 100 lbs.	2.50	3.00
POULTRY,	"	15	
EGGS,	" per dozen	15	
BUTTER, Fresh,	" per pound	13	15
" Fickin,	"	10	12
CHEESE,	"	5	6
LARD,	"	6	7
TALLOW, Clear,	"	8	9
HIDES, Green	"	5	
SHEEP SKINS,	"	38	62
PEARL ASHES,	" 100 lbs.	5.00	
POT,	"	5.25	
WOOL,	"	30	40
HAY,	"	11.00	13.00
GRASS SEED,	" bushel,	1.25	1.50
CLOVER SEED,	"	6.50	7.00

New York Market, Jan. 29.—The foreign news has lowered the price of Ashes. Pearls have been sold at \$6.25, on there are still sellers at that price; for Pots there are buyers at \$5.75. All provisions remain dull—4000 kegs old Ohio sold at \$11.12 1/2 cash. Flour is dull at 11c and Flaxseed at 12 1/2c. The price of the new Genesee Flour is no longer dearer; there have been sales at 80c, but holders are not disposed to go on at that. There is nothing to report in Grain, Meats, or Cattle. Sugar and Molasses are better. The rate is 7 1/2 cts, with a good demand.

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From the Power-Press of J. I. Reilly & Co.

THE NEW GENESSEE FARMER

AND GARDENER'S JOURNAL.

BATEHAM & COLMAN, } VOL. 3. ROCHESTER, MARCH, 1842. NO. 3. } HENRY COLMAN, Editor.

PUBLISHED MONTHLY. TERMS.

FIFTY CENTS, per year, payable always in advance. Post Masters, Agents, and others, sending current money free of postage, will receive seven copies for \$3.—*Trial* copies for \$1.—*Twenty* five copies for \$10.
The postage of this paper is only one cent to any place within this state, and one and a half cents to any part of the United States.

Address BATEHAM & COLMAN, Rochester, N. Y.

For Contents see last page.

PUBLISHERS' NOTICES.

[*Can't Take It!*] verily these are troublous times. The Currency of the country is in a state of confounded confusion, and we are compelled to inform our distant friends that for the present, we cannot consent to receive the *promises to pay* of the Banks in Pennsylvania, Ohio, Indiana, and Illinois. The Brokers refuse to purchase them, and we have no means of using them. These circumstances will of course affect our circulation in those States for the present, but we hope this panic will not last many months. As soon as the Banks resume payment their bills will be received.

To our friends in this State and New England, we would say our dependence is upon you. Our Western patronage is now mostly cut off and we must rely upon you to make up the deficiency, from those States where the Currency is not so deranged.—Our increased expenses require, and we trust *deserve*, an increase of revenue.

Acknowledgements.—We cannot write letters of thanks to the numerous kind friends who have thus far nobly added us, but we hope they will not on that account do us the injustice to suppose that we are ungrateful or that their favors are forgotten. Without their aid this paper could not exist, and therefore the country is indebted to them for whatever benefits result from its circulation.

A Meeting of the Monroe Co. Agricultural Society.

Will be held at the Arcade, Rochester on Thursday the 17th inst, at 10 o'clock for the purpose of making out a list of premiums and appointing Awarding Committees for the next Annual Fair. This is a very important meeting and it is hoped that all who feel an interest in the Society, and especially all the officers, managers and town-committee men will be present. (See the list in another column.)

A Farmer's Dinner will be provided at the Arcade House—price 25 cents.

CORRESPONDENCE.

We cannot but feel highly gratified with the many kind letters which we have received, of which the following is an example, from one of the most intelligent and public spirited farmers in Western New York.—He will pardon us for omitting a portion more strictly personal. These letters proffer us a cordial welcome to Western New York, and invitations to visit the homes of the farmers who write them. For the welcome we are heartily thankful, and the invitations we accept with an equal pleasure. We desire no higher honor in this world than to be accounted the Farmers' Friend; and we can ask to render no higher service to our fellow men than to contribute what we can in inducing the farmers to form a just appreciation of the usefulness and dignity of their profession, to enjoy with a higher zeal, its pure and honest satisfactions; and to improve and increase to their utmost capacity, its great, but as yet, not half explored advantages.

Letter I. Agricultural Improvement. MR. COLMAN:—

Be assured, Dear Sir, that you are not alone in the "pleasure" which you experience, "that the Editor is at home in Rochester," yet *not so* "at home in Rochester" it is hoped, that other parts of Western New York will not receive his visits; even further West than Monroe County. For the "hospitalities" of "Niagara" will doubtless be as warm and as spontaneous, as those of "Wheland" even. I am glad he "does not intend to stand much upon ceremony," for whether the "banes" be published or not, is of very little consequence, as that is not, in this state, a pre-requisite to the "nuptials."

It is to be hoped, however, that when the Editor goes abroad among our agricultural community; he will bear in mind that he is not in the "Old Bay State" where the lands have been cultivated more than two hundred years, and that too, with much skill and industry; but that he is in the "Genesee country," where for three fourths of that period, this whole region was inhabited, only by the red men of the forest. We are emphatically, in our agricultural youth, for, as a community, we have for the most part been able barely to pay the exorbitant price for our lands,—clear them of the unbroken and heavy forest,—and support our families. As to the matter of ornamental improvements which so greatly abound in your native State, very little can be seen in this region; although some few are beginning to feel a little comfortable in their circumstances. But the great majority of us are, or pretend we are, too poor, and too much in debt, even, to pay fifty cents a year for an agricultural paper: and of course, you will not expect to find us very far advanced in scientific husbandry.

You will doubtless find, Mr. Editor, in the greater part of Western New York, that although we possess one of the most desirable agricultural districts in the world; yet, we cultivate our lands, not as science and wisdom would dictate.

One of the greatest errors of our practice, is the indifferent and slovenly manner in which we manage our crops.

A very general stupidity in regard to the idea of improvements in husbandry, prevails among us. If we raise from 15 to 20 bushels of wheat, 30 to 40 of corn, 100 or 180 of potatoes per acre, we are tolerably well satisfied, and trudge along in the old track of our fathers. And when we, perchance, hear that "somewhere down east," crops of grain are raised, double or triple to ours, we discredit the story, instead of enquiring how it was done.

But enough for the present, lest the Editor should feel discouraged, without even a visit to his new friend NIAGARA.

Thorn Hill, February, 1842.

We subjoin extracts from the kind letter of another correspondent, showing the most substantial proofs of his good will. We can only thank him, and promise to do our best to justify his good opinions, and make

our paper worthy of his exertions. The exertions of our friends Cook and Horsfield remind us of a kind-hearted Frenchman. A poor fellow had been burnt out and lost a large amount of property. A crowd of friends the ensuing morning were round him commiserating his misfortune, and saying very kindly that they pitied him. The Frenchman heard them with some little impatience. Oh! said he, my good friend, you all say you pity this poor man ver much, but you no say how much. Now I pity him one piece linen; and gave the poor fellow a piece of linen.— This was real kindness; and if it did not savor too much of the shop, we should call this showing one's faith by one's works, a very commendable kind of religion in the apostle's time. We say nothing of modern improvements in this matter.

LETTER II.

A Friend in need, a Friend indeed.

MR. EDITOR:—In looking over the contents of the last Farmer, I was much pleased with a communication from your correspondent J. Horsfield, in which he calls upon all the readers of the Farmer to "take this No. and go through their neighborhood and call upon every man to subscribe." Well, agreeably to his plan, I took the paper and started, and in a short time I obtained ten subscribers, and in no case was I under the necessity of urging them or "talking to them like a Book," but on examining the paper and learning the terms, they very willingly paid over to me fifty cents, with the request to have it forwarded immediately.

Your correspondent proposes that every one of the present subscribers should obtain five new ones. Now I most earnestly hope this request will be complied with; but I would not limit the number to five. I would say to every one, *get all you can*. If you cannot get but one, get that; and if you can get five, ten or twenty, so much the better. I have already obtained ten, and I do not intend to stop here, but hope I shall soon be able to send you another list of names. If I could make my voice be heard by every Farmer in Western New York, I would say to them, take the Genesee Farmer, and not only take it but read it.—The benefits to be derived from it are very great, and its cost very small. *It is our own paper*, and we ought to use all our influence to sustain it.

I hope the subscription list for this volume will show that the farmers of Western New York give our new Editor a hearty welcome.

I am glad to learn that he is at home in Rochester, where I intend soon to give him a call and talk over matters and things; should it be consistent with his other engagements, I should be happy to have a call from him on my farm in Byron, Genesee County.

Very respectfully, Yours, IRA COOK.

Agricultural Chemistry.

The premiums of the New York State Agricultural Society for 1842, will appear in our next. They offer a premium of 100 dollars for the best Essay on Agricultural Chemistry, of which we hope our Eastern friends, S. L. D., and J. E. T., and C. F. J., and J. W. W., will take due notice, and govern themselves accordingly.

Inquiry.—Indian Corn for Fodder.

MR. EDITOR—

I wish to sow two or three acres of corn for the fodder, and not being acquainted with the crop, I should like to be informed as to the quantity of seed to be sown per acre, the time of sowing, the manner of tilling or putting in the crop, at what time the crop should be cut up, and all other little particulars concerning it, that I may be successful in the experiment.

If you will give the necessary information through your paper, you will afford many subscribers valuable information. If such a crop will produce from five to seven tons per acre—after being cured—as some persons pretend that it will, it would be well for farmers to understand it.

Ledyard.

Cayuga Co., N. Y.

Remarks on the above.—The cultivation of Indian Corn for fodder may be well recommended to the farmers, especially where pasturage is deficient, or in a season where the crop of hay is likely to be small. Among the farmers who supply the cities with milk, it is a favorite crop, and is given to their cows at night and morning to assist a short pasture. In such cases it is sowed at successive seasons, every week or fortnight, so that the crop may be coming on as needed. It is sometimes cut when it is knee-high, and then in general it will start a second time, so that another cutting may be obtained. This should not, however, be confidently relied upon. Where it is wanted for green feed, it is of course advisable not to cut it until the plant is in perfection; we do not mean until the seed is ripened, but until the leaves and stems are as abundant and large as they are likely to be; that is when the flower is protruded, and the ear formed, and yet no part of the plant has become too hard to be completely eaten up by the cattle. Every farmer, therefore, may make his calculation as to the time of planting. The earlier he plants, the sooner he will have the fodder and the more of it to give to his stock; and by planting at successive times according to his convenience, he may keep up a supply of succulent food to the very end of the season. None need be lost; and every leaf and stem of it should be saved, even after the frost has killed it.

We have seen the plant cultivated to great advantage for soiling cows; in many instances; in one where twenty cows were kept; in another where a hundred cows were soiled. In the latter case several acres were sown with corn for this purpose; and it was cut and brought into the barn as wanted. There was no feed of which the stock were more fond; none which produced more milk; and none obtained at a less expense. It was all cut short by a machine, and while gathered green every particle of it was consumed. When in the autumn it became dry, it was steamed for the stock. Among the milk farmers, near the cities, its cultivation is constantly increasing.

We have known it likewise much used for store hogs. Where pasturage is deficient, or where they are kept in sties, no green food is more relished by them or more conducive to their thrift. In this case, however, it is of course given to them in a green and succulent state.

We have not known it cultivated extensively for winter fodder, but there is no reason why it should not be. In this case it would be desirable to sow it early, if we would have the largest crop, and let it come to what maturity it will. The value of well-cured corn fodder for stock is settled. The cattle have determined the question long ago by

the relish with which they eat it; and the good condition in which it keeps them. The amount of well-dried corn fodder, including butts as well as tops, where the crop is fifty bushels, is generally estimated at two tons; this of the small yellow flint variety of corn; the southern gourd seed variety and the Western corn, produce a much larger amount. Farmers in general are disposed to estimate the fodder upon such an acre of corn, well saved, as equal for any neat stock, to one ton of English hay. Some place it at one and a half ton; none lower than three fourths of a ton.

The only instance, which has come within our knowledge, of ascertaining with any exactness the actual amount of fodder or stover upon an acre, was in Pennsylvania, where we infer the gourd seed variety was cultivated, and where the crop amounted to 66 bushels. In this case

	Tons.	cwt.	lbs.
The blades, husks and tops, when cured, amounted to	1	6	13
Stalks and butts	1	7	00
	2	13	13

How much could be obtained by sowing it exclusively for fodder, we have no means of determining with any accuracy.

Nor have we any certain prescription to give as to the amount of seed to be used for an acre; certainly not less than half a bushel, nor more than two bushels. Corn is a plant which, in rich soil, tillers abundantly or throws out many suckers, unless where it is very thickly sown, in which case it conforms to every other plant in its habits of growth, and runs up in a slender form like bushes in a thick swamp. Many persons advise to sow it broad cast, in which case it admits of no after cultivation; and the weeds, if the land is rich, will check its growth and fill the ground with their seeds. It is best to sow it in drills two feet apart, and quite thickly in the drills, scattering the seed over a space in the row, six inches or a foot in width. It may then be ploughed or passed through with a cultivator once at least; and in a measure keep clean from weeds. It is believed that as much fodder may in this way be obtained from an acre, as if sown broad cast.

The land cannot be made too rich for it; and it need not be gathered until it is ripe. There may be a good many imperfect and some ripened ears among it; but the cattle will not like it the less on that account. The Irishman was asked how he kept his horse so sleek and fat; and "faith!" says honest Pat, he has nothing but white straw, your honor, and that is not *half threshed*." It is a prevalent opinion that the top stalks of Indian corn when cut in a succulent state, and cured quite green, are better than when left to ripen. It is believed that this is an error; as the experience of observing farmers, we think, will show that their cattle do better, prefer them, give more milk and show better thrift, when fed upon the buttstalks, that is the leaves and husks upon the butts after the corn has been gathered, than upon the top stalks gathered and cured in a green state, as above described. The fodder need not then be harvested until it is, as it is termed, nearly dead ripe. Corn fodder when cut green, especially late in the season, is cured with great difficulty; but if left to stand until it is either killed by the frost or reaches maturity, it is as easily saved as hay. In putting away corn fodder, we have found it advantageous to insert occasionally, layers of wheat straw. The sweet flavor of the corn fodder is communicated in some measure to the straw; and the straw serves to keep the

corn fodder from being injured by heating. No fodder suffers more or sooner from wet or rain than corn fodder. Every possible pains should, therefore, be taken to avoid this; and it is a good way to hang as much of our corn fodder, as we have room for, on the beams and on poles extended over the barn floors, and in sheds where it will be out of the reach of the cattle.

As to the kind of corn to be sown, the Southern gourd-seed or the Western corn, will undoubtedly give the largest weight; but much of it will be in the butt, no part of which will the cattle eat. Our common Northern small flint corn will yield a large amount to the acre, as it will bear thick sowing; and the main stalk is not so large but that a good deal of it will be eaten, especially if cut up.

Improved Durham Short Horns as Milking Stock.

I subjoin a letter from Wm. K. Townsend, of New Haven, Conn., received since my Fourth Report of the Agriculture of Massachusetts was published. From this report an extract has been given, both in the number for February and in the January No., relating to DAIRY STOCK, in which the claims of this race are examined under the light of the fullest information which I had then obtained or could obtain. The reference made to the stock of Mr. Townsend in my Fourth Report, p 273. No. 7, was founded on the statement of the Committee on Farms of the New Haven Agricultural Society. Had his letter reached me in season, I should certainly have inserted it with pleasure.

There can be no doubt of the authority of this letter. It is worthy of full confidence, and speaks well for the milking properties of this valuable race. The quantities of milk reported are remarkable. The statement, however, is positive only as to three of the animals. "Lady," during the winter averaged 18 qts. per day, and in her prime and on full feed, gave 30 qts. per day. She was a selected cow.

"Favorite," her offspring, gave 22 qts. Having lost one teat, her greatest quantity since has been 24 quarts.

"Beauty," the daughter of Favorite, and grand daughter of Lady, gave 10 qts. on the morning of the day when she calved, and after that increased to 30 qts. per day, at which rate she continued for six or eight weeks. It is not said whether the measure was beer or wine quarts, but I presume the latter; 30 wine quarts would be equal to about 21 beer quarts. If the milk was measured in the pail, little reliance can be placed upon the exactness of the measurement. This case presents one among the frequent examples of the indefiniteness with which statements of this nature are made. It would have been gratifying to have been told how the cows were kept.

In respect likewise, to the right thorough bred Durhams, descendants from Lady, all, as Mr. T. says, superior milkers, and of whom he adds, we estimate their average yield for eight weeks after calving, at 24 qts. per day, on good feed; it will be seen that this is matter altogether of estimate, not of ascertainment. It must therefore be set down as such.

It is to be regretted that Mr. T. has made no trial of the better properties of the milk. The facts that "it brings the best price in the New Haven market," that "his family deemed it richer than the milk of native cows, when placed side by side," that "the milkman pronounced it the richest he had ever carried to market," and that "some of his customers consider it the best they can procure," are all valuable as opinions or presumptions in the case; and certainly without the slightest disparagement to, but with the highest respect for the judgment of the gentleman, who certifies this account, it will be seen that these are all matters of private opinion and judgment, and therefore by no

means conclusive as to the butter properties of the milk. This can only be certainly determined in the churn.

It was said to me at the meeting of the State Society at Albany, by two or three friends, that it was understood that *none* the New Genesee Farmer would come out as the opponent of the Durham Short Horns. I answer that no man has either right or reason to say this. I do not choose to be put in this position. I am not the opponent of the Short Horns; far from it. I am an admirer of this race of animals. But I am the friend of truth in the case, and I shall go for facts, and seek, as honestly as I can, to make up my judgment, and shall have no hesitation in avowing that judgment, when it is made up; and shall not be ashamed to alter that judgment when I see occasion to alter it, even at the risk of being tossed upon the horns of these cattle as high as the most stiff-necked among them or their advocates can throw me.

H. C.

East Haven, Conn., Dec. 10, 1841.

MR. H. COLMAN—

DEAR SIR—In compliance with your suggestion, communicated through H. Whitney, Esq., of New Haven, I will endeavor to give you a few statements respecting the quantity and quality of the milk from my thorough bred Durham cows.

"Lady," from whom my stock originated, was purchased in England by Henry De Groot, Esq., in May, 1829, of Asahel Ashcroft, Esq., of Bank Hale Farm, and was then four years old. She arrived in this country in July of that year, and on Dec. 23th, brought a fine heifer calf—named Favorite. Lady, during the winter succeeding, averaged 18 quarts, and when in her prime gave, while in full milk on good feed, 30 quarts per day.

At two years old, Favorite gave 22 quarts; but losing one teat by accident, her greatest quantity since has been 21 quarts.

Favorite's first calf, "Beauty," is a superior milker, giving milk freely up to the very day of calving. On the 4th of May last, she gave 10 quarts in the morning, and in the afternoon returned from the pasture with the calf she had dropped during the day, by her side, and gave an equal quantity. She immediately increased to 30 quarts a day, and so continued for 6 to 8 weeks, until the pastures failed from the drought.

I have eight thorough bred cows, descendants of Lady, and all superior milkers. We estimate their average quantity during the 8 weeks after calving, on good feed, at 24 quarts per day.

As all my milk, for several years, has been sold in New Haven, it has not been convenient for me to ascertain the precise quantity of butter which might be made from the milk of each cow. My milk is rich and sells readily at the highest price in the city, and is pronounced by good judges there, the best which can be obtained. Butter made by us from milk left occasionally, is of the first quality in color and in flavor, and the thickness of the cream, as compared with that upon the milk of native cows, placed side by side, has been such as to attract the notice of my family. The person who has purchased my milk for the year past, has had experience in the business, and he declares the milk from my Durham cows the richest he has ever taken to market.

Very respectfully, &c.

WM. K. TOWNSEND.

This certifies that I have used in my family, milk obtained from many different persons, but for the last year have procured my supply from Mr. Townsend's dairy, and that, I am fully satisfied, it is the best I can procure in the city.

CHARLES ROBINSON.

New Haven, Dec. 10, 1841.

Charles Robinson, who subscribes the above certificate, is one of the most active and enlight-

ened friends of Agricultural Improvement to be found in this good old Yankee State. We are happy to see his name affixed to any communication in our paper; and shall be much gratified to find it often appended to communications much longer. We assure him a hearty welcome whenever he will favor us, and a cordial co-operation, as far as our humble power can be exerted, in the cause which he and his disinterested coadjutors have so much at heart, the improvement of Connecticut Husbandry.

Durham and Devon Stock.

Mn. Editor—

SIR—In answer to an inquiry in the December number of the New Genesee Farmer, by A Subscriber, as to which I consider the best breed of cattle, the Durham or the Devon, I would say, that I have not had much experience with the Durham, excepting one bull. My oldest stock of that breed are only one year old last spring. They are quite large of their age and appear to be tolerable good feeders, but they have not that symmetry of shape that would be desirable, excepting these from Devon cows (crossed). I have raised crosses of the Devons for a number of years, and I think they are the best stock to cross with our native cows, being more uniform in shape and color, and in my judgment, are the best stock of cattle for the majority of farmers in the Genesee country, all things considered. They are very much sought after by eastern drovers.

GEORGE SHEFFER.

Wiscasset, Jan. 15, 1842.

Remarks—We give the above from a respectable farmer and agree with him, that he is a very incompetent judge of the Durham Stock if he has had none, excepting a bull, more than one year old. He as yet can hardly judge of their shape, as animals of a large size seldom attain perfection of size early.

The cross of the Devons with our best native stock, is most strongly to be recommended, especially in reference to raising oxen; how far it may improve the milking qualities of the cows remains to be determined.

That this cross constitutes the best stock for the Genesee Country, with our recent and imperfect knowledge of the localities, we shall not presume to give even an opinion.—En.

Berkshire Pigs.

Mr. E. Marks, in the last number of the Cultivator, gives the weight of four Berkshires,—1838 pounds; pretty good, to be sure. But we have some in this neighborhood quite their equals. Mr. Carter, who has taken four premiums on Berkshires of the Ontario Agricultural Society, fattened two out of a litter of eleven pigs, and slaughtered them the day they were twenty months old. Their aggregate weight was one thousand and forty-four pounds. Yours &c.

MYRON ADAMS.

East Bloomfield, Jan., 1842.

For the New Genesee Farmer

Peat.

MR. COLMAN—There has recently been discovered in this vicinity, an extensive bed of peat. It is situated about midway between the villages of East and West Bloomfield, half a mile North of the road. It is found in a whorleberry swamp, comprising some sixty or seventy acres. The discovery was accidental. A man passing on the bank of a ditch during the very dry weather of last autumn, observed the muck thrown out of the ditch to be hard, and crumbling under his feet like charcoal, was induced to try some of it in a blacksmith's fire, and found that it burned readily. The swamp was burned over last fall, and the surface is now smooth, with little else upon it but the fibrous

roots of the whorle bushes. The peat is found about six inches below the surface, and is said to vary from three to ten feet in depth. While lying in the bed it resembles common swamp muck—is more compact, and of a slightly reddish cast. When dried it is hard and friable, lighter colored than common charcoal, receives a polish, and burns with a steady clear flame.

I understand that a company has been formed who are to commence digging it next spring. It will undoubtedly be a valuable acquisition to this part of the state.

Yours, &c.,

MYRON ADAMS.

East Bloomfield, N. Y. 1842.

Remarks on the above, and on Redemption of Peat Meadows.—There cannot be much doubt that the substance our respected correspondent has described is peat; and the reddish coloring matter mentioned comes from iron mixed with it. A company he says is formed to commence digging it the next spring; but what is the specific object of this company, whether manure or fuel, is not said.

As a manure, peat forms a valuable ingredient in compost; being formed wholly of decayed vegetable matter, it is well adapted to restore to the soil the element, which cultivation exhausts. It requires, however, decomposition or disintegration before it is in a condition to apply to the ground. Lord Meadowbank's process for its reduction, of which so much is said in English agricultural works, consisted in forming a heap of peat with intervening layers of horse manure, which, taken green from the stables, soon produced heat enough to reduce the peat. Lime is recommended by Dr. Jackson, for the same purpose, but it must be quick lime. Dr. Dana recommends ashes, of the superior advantages of which we have no doubt. Peat likewise, the coarser kinds especially, may be advantageously thrown into the bog-eyes, where the bogs will soon reduce and intermix it with other substances; and it may with particular advantage be thrown into a barn cellar where the bogs have access, and where, if the manure from the horse stable is likewise deposited, the peat will act as a most useful absorbent; and the whole contents be made valuable. In many cases what is called black muck, is composed like peat of decayed vegetation, and seems to be peat in an incipient state. Do the farmers of Ontario county require this for a manure? We had supposed not; but our information is of necessity extremely imperfect. While they have vast amounts of wheat straw, and spent ashes lies untouched in large heaps at the potash establishments, and plaster works its magical effects among them, and clover affords its enriching nutriment, and their flocks of sheep are numerous, we had supposed, on their new and unexhausted soil, they would require few additional materials for manure.

As fuel, peat is highly valuable, where better substances cannot be had; but who would think of using peat where the best of rock maple and beech and hickory can be had for two dollars per cord? The odor of burning peat is offensive to most people; its ashes are very light and fill the house with dirt; and the trouble of digging and drying and carting is a good deal more than that of getting wood, and occurs at a season of the year when time is worth much more to the farmer than in the season of getting wood. We might be driven to use a peat fire by necessity, but was should never go to it from choice. It has, however, one great advantage; a block of peat kindled and raked up in the ashes will keep alive for a week.

If our friends, however, choose to use it for fuel, they will allow us to give them one word of advice as to curing it. In general, this is done by piling it in stacks crosswise on the margin of the meadow. Here it must remain sometime; and, if the season prove wet, it will be a long time before it will be ready for

being boused. The best pest we have ever seen has been cured in this way. After being dug, let it lie long enough upon the ground to become drained, and then let it be carried home and piled up in a shed, where, while it is protected from the rain, there is a thorough circulation of air round and among every part of the heap. This is much the least troublesome way of curing it; and the pest is heavier and will give more heat than when dried in the usual way in stacks on the field.

Our friends, however, may, we think, if we understand its condition, appropriate their peat meadow to a much better purpose, than that of either manure or fuel. Let them ditch and drain it thoroughly, or at least so as to reduce the water eighteen inches below the surface; then let them pare and burn the sods, at such a time that the meadow itself will not take fire; spread the ashes; put on a good dressing of compost, half loam and half manure, well mixed, and sow liberally of hard-grass, red-top, and clover. Or if they prefer a less expensive process, let them ditch and drain their meadow as above; clean away the rubbish with a stiff harrow or drag; and carry on, at a season when they can get on to the meadow with a team, good loam and sand, and spread to the thickness of two or three inches, and then sow grass seed as above. Or otherwise before the frost is entirely out, and when they can turn over the surface to the depth of four or five inches, let this be done carefully, inverting every sod, and then let a dressing of mixed manure be applied, the land sowed with grass seed as above advised, and rolled. The most thorough way of doing the business is undoubtedly the best. By this management, this land may be brought into most productive grass land, yielding, as we have repeatedly known, three and four tons to the acre. After three or four years a compact sward is formed, when it may be ploughed and cultivated with common crops. Within our own experience it has produced the best of rye, corn and oats. In Ireland, great improvements have been made in this way, and near Liverpool portions of Chat Moss have been redeemed in a similar mode under the direction of Mr. Reid. We regret that we have not at hand the means of stating the process of Mr. Reid and the results, but this we shall be able to do hereafter. The crops of wheat obtained on land redeemed in this way, were most remarkable. Much of this description of land has been recovered and improved in Massachusetts, of which we propose shortly to give a full account.

"Black Gum"—Bowlders—Mediterranean Wheat—Peach Buds.

[In a letter from Cayuga County.]

BLACK GUM.—On a late journey to Auburn, I observed plum trees in great numbers along the road, tricked out in all the finery of "black gum"; and I was rather gratified to see the progress it had made.

Rejoicing at the misfortunes of others? No—far from it; but the trees must soon die in the hands of their present owners, who take no care of them; and the sooner they die, the better.

Is that so? Yes, and I can prove it. Every one of these trees is a nursery of insects, to annoy the trees of their industrious neighbors; and so long as such nuisances exist, so long must every pomologist within a mile or two of them be in a state of continued watchfulness or warfare. When all these worthless trees perish, however, the insect, having no place to breed in, and nothing to live on, must perish too; and then—the dark cloud having passed over—plum trees may grow and flourish as they did ten years ago.

Although we have given line upon line, and precept upon precept, yet it may be proper to mention the remedy for this "evil" once more. Possibly some landed proprietor may be awakened up, and induced to exert himself as it were at the eleventh hour.

Cut off all these black bunches or excrescences, which probably at this season, however, contain no insects, for their removal is necessary to enable us to detect the *new* bunches which will form late in spring or early in summer. The latter, containing the worms or larvae, should be carefully burnt as soon as they are discovered; but to prune the tree thoroughly, removing all surplus wood, and leaving the branches so open that any new excrescences may be detected at a glance, would save much time and trouble.

BOWLDERS.—Every traveller in this part of the State, whose perceptive faculties are well developed, must have observed that fragments of rocks, varying greatly in size, are scattered over the land; and that most of them differ entirely from the rocks which occur in regular strata.

Now how did those bowlders get there? This question would be answered very differently by different persons.

Some believe that *stones grow*; and that the pebble of to-day may become a large rock in future years. In other words, that they grow as naturally as pumpkins. Nobody, however, has discovered the stem that rocks grow on; nor the veins or pores through which their nutriment circulates. *Animal life* and *vegetable life* are familiar terms; but *mineral life* would be something new in the language of naturalists.

Other people who (like the former) have not studied causes and effects, quietly conclude that those fragments have *always been there*; and see no reason to wonder at their appearance. It has been observed, however, that nearly all the rocky strata in Western New York abound with the remains of animals that once existed; and which could live buried deep in the earth no more than a horse or a cow could live there. When alive they were at the surface of the ground, though that surface was probably at the bottom of the sea; but certainly they never lived with those rocks on their heads; and if we may judge from the plainest analogy, every one of those bowlders, lies directly over the remains of some animal.

It will be ample to conclude, therefore, that there was a time when these rocks were not in their present positions; and the question may properly recur, how did they 'get there'? In a late lecture on Geology, delivered by Professor Silliman in the city of New York (as reported in the Tribune), I find the following remarks on the *transportation of bowlders by means of floating ice*:

"It is not at all necessary to draw upon the imagination to understand this fact; for it is a matter of observation that ice-islands of vast magnitude are frequently torn away from their beds and floated through Hudson's and Baffin's Bay to more southern regions. I have seen myself ice-islands floating through the ocean, towering from one hundred and fifty to two hundred feet above the surface of the sea; and as we know that floating ice never shows above the surface more than one eighth of its bulk, we may reasonably conclude that islands of sixteen hundred feet in thickness frequently float from the Arctic regions to more southern climes. It is easy to see then, that these islands are capable of transporting immense loads of rock, far more heavy than the largest ships of war; and it is obvious that when these islands float into warmer regions, they must melt and drop their load. Thus the rocks which come from the most northern regions are deposited in the bottom of the southern seas. These masses, transported thus, may be seen off the West Coast of South America, and at the island of Chiloe. The process has long been going on, and will be in progress forever."

These remarks present a very interesting view of the subject, and there can be no doubt of their cor-

rectness; but they fail to cover the whole ground. The bowlders in this part of the country, generally show the effects of attrition; and where they are derived from rocky strata on this side of Lake Ontario, some estimate may be made of the distance that they traveled, from their change of form—the nearer to their native beds, the more angular—the further, the more rounded and worn. Fifty miles of rolling and grinding have effected great changes; but fifty miles of navigation would produce no such results. I must, therefore, conclude that our bowlders generally traveled by land.

MEDITERRANEAN WHEAT.—A letter recently recently received from a (*fourth*) correspondent near Philadelphia, contains the kind and liberal offer of a barrel of the *Mediterranean Wheat* for sowing next fall, with the following additional information:

"Its character here is rising, improving as it becomes acclimated. We have not yet tried it for bread, but [A. & B.] who are remarkable for having very nice bread, say that it is excellent; and that the flour is more like what they used to have in old times."

It may be remembered by some of your readers that this wheat is exempt from rust, and from the attacks of the Hessian fly.

PEACH BUDS.—In my letter contained in the first number of the current volume, I mentioned that the peach buds had swelled; and that unless the winter should prove unusually mild, they would be likely to perish. Well, the winter has been unusually mild—they remain uninjured; and the lateness of the season (2 mo. 20.) encourages the hope that the danger from intense cold is nearly over.

The Principal of the Cayuga Academy at Aurora, has politely furnished me with observations made at that place, on the temperature. The greatest cold was on the morning of the 14th of the first month when the mercury stood at 6° above zero; but further from the lake and at a greater elevation; it was doubtless colder. Between Aurora and this place, however, I think the difference would not be more than two or three degrees, so that with us there must be more than thirty degrees of frost to destroy the blossom buds of the peach when they are swelled. The least buds are much harder.

Ontario Agricultural Society.

This Society held their usual meeting at Canandaigua on the 8th ult. So inclement a day has hardly been experienced this winter; and the roads were extremely bad. The attendance of Farmers was good but the show of agricultural products and stock was very small. It could not have been expected that the animals, unless they had a good deal more public spirit than their owners, would consent to be tied to a stake and shown upon the common on such a day as that, for the gratification of public curiosity or their own vanity. We found very few of the farmers willing to "take airs" upon themselves on the occasion and who did not prefer looking at a good maple fire to looking at a fat ox, though they seemed to have no objection to the latter after he had been at the fire like wise. This season of the year in our climate, is very unsuitable for a cattle show.

The premiums were awarded as follows:

To Pitt May, of Hopewell, for the best two acres of Wheat, \$10. The yield was 37½ bushels per acre
To Jesse H. Bannell, of Canandaigua, second best ditto, \$7. 28 bushels.
To Eph. W. Cleveland, of Naples, for the best field of Corn, not less than one acre, \$7. 82½ bushels per acre.
To Royal A. Andrews, Bristol, for second best do \$5. 70.21 bushels per acre.
To Bani Bradley, of E. Bloomfield, third do. \$3. 43.61 bushels per acre.
To John Raines, Canandaigua, for the best field of Barley, no less than one acre, \$5. 41½ bushels.

To Joel S. Hart, Hopewell, second best do. \$3.
To Bani Bradley, E. Bloomfield, for the best field of
Oats, \$5. 3½ bushels per acre.
To Myron Adams, E. Bloomfield, second do. \$3.--
69.12 bushels.

To Joseph Blodget, Gorham, for the best acre of
Peas, \$5. 47.35 bushels.

To Wm. Bryant, Manchester, for the best field of
Potatoes, \$5. 100 bushels on half an acre.

To Chas. B. Meek, Canandaigua, for best Rye Biscuits,
\$5.--30 tons. Same, \$3 for second best, 22 tons.
Same, \$5, for best Mangel Wurzel--15 tons on
153 rods.

To Chas. Godfrey, Seneca, for best yoke of Fat Oxen,
\$7.

To Myron Adams, East Bloomfield, for the best fat-
ted Cow, \$5.

To Geo. Cayward, Seneca, for second best do. \$3.
To Cassius Osborn, Gorham, third do. \$2.

To Myron Adams, E. Bloomfield, for best fat Steer,
\$5.

To Sam. Greenleaf, Canandaigua, second do. \$3.
To Chas. B. Meek, do third do. \$2.

To A. M. Bass, Hopewell, for the best fat Heifer,
\$5.

To John Biddle, Canandaigua, for best six Fatted
Sheep, \$5.

Mr. Godfrey's fat oxen, a cross with the Devon,
and Mr. Myron Adams' steer and cow, of Devon
blood, would have done honor to any show. Mr.
Cayward's cow was a very fat and heavy animal with-
out any pretensions to aristocratic blood, and certainly
none to symmetry or beauty.

Monroe County Agricultural Society.

At a meeting of the Monroe County Agricultural
Society, held at the Arcade, in the city of Rochester,
on the 19th day of February, 1842.

The meeting was organized and proceeded to the
election of officers for the ensuing year, when the
following persons were elected:

For President,

HENRY COLMAN, Rochester.

For Vice Presidents,

WILLIAM GARBUTT, Wheatland,

LYMAN B. LANGWORTHY, Greece,

WILLIAM C. CORNELL, Henrietta.

HENRY M. WARD, Recording Secretary.

M. B. BATHAM, Corresponding Secretary.

For Managers,

Rawson Harmon, Wheatland,

Nathaniel Hayward, Brighton,

Ass Rowe, Gre. ce.

Caleb K. Hobbie, Irondequoit,

E. H. Barnard, Mendon,

Jacob Swann, Chili,

Gideon Ramsdell, Perinton,

Miles Lawren, Ogden,

John H. Robinson, Henrietta,

Alfred Fitch, Riga,

Abel Baldwin, Clarkson,

F. T. Root, Sweden,

David M. Smith, Rush.

For Town Committees,

Wheatland--Jirah Blackmir, George Sheffer,
Samuel Wood.

Chili--William Pixley, John K. Valentine, John
Toller.

Riga--Dennis Church, Charles Tenney, John
Rowe.

Ogden--Oliver Day, Modad P. Parker, Jesse
Harron.

Sweden--S. D. Baldwin, George Allen, Hum-
phrey Palmer.

Clarkson--David Forsyth, Frederick F. Church,
Abel Baldwin.

Parma--L. W. Metcalf, Roswell Atchinson,
Abner Darling.

Greece--Hall Colby, Nicholas Reed, John Moxon.
Gates--Lyman Potter, Moses Dyer, Matthias
Garrett.

Brighton--Timothy Wallace, Romanta Hart,
Oliver Culver.

Henrietta--Matthias L. Angle, James Sperry,
Stephen Legett.

Rush--Thomas Wright, William M. Mott, Chas.
Chamberlin.

Mendon--Abner Cole, Benjamin Birdsall, Jr.,
Thomas Wilcox.

Pittsford--Alexander Voorhees, Ira Bellows, El-
eazer Sutherland.

Perinton.--Zerah Barr, A. Goodell, Elisha Ram-
sey.

Penfield--Elias Beech, Daniel Fuller, Samuel
Miller.

Webster--Bryan Woodhull, William Holt, Alphe-
us Crocker.

Irondequoit--Benjamin King, H. N. Langworthy,
Cummings.

Rochester--Alonso Frost, E. Darwin Smith, Na-
thaniel Ormer, Ansel Frost, George Whitney, Alex-
ander Keley, Patrick Barry.

On motion, it was Resolved, That measures be
taken by this Society for establishing an Agricultural
Museum in the city of Rochester, and that a commit-
tee of five be appointed to make inquiry respecting a
room for the purpose, and to send a petition to the
Governor and Legislature for a set of the specimens
of Natural History collected by the Geological Sur-
veyors, and to report at the next meeting of this Soci-
ety.

On motion of E. Darwin Smith, Resolved, That
the thanks of this Society be tendered to Lyman B.
Langworthy, for the able, diligent, and faithful atten-
tion to the duties of the office of President of this
Society for the last two years, during which he has
officially acted as such.

Adjourned to meet at the same place on the 17th of
March next, at 10 o'clock, A. M.

HENRY M. WARD, Rec. Sec.

The First Effects of the Bankrupt Law.

We are told by the New York papers that since
the operation of the Bankrupt Law, numbers in
that city have come forward to compromise with
their creditors who for years past have made no
effort to pay their debts. They now evidently
dread the searching operations of that Law.

The doctrine that when a man fails, he has more
money to expend in show and amusement, seems
now to be on the eve of an explosion. With pru-
dence and economy--hard times can neither affect
a farmer's independence, nor retard his mental
culture and intellectual pleasures.

In some of my former brief articles, I have en-
deavored to impress my rural friends, with the ne-
cessity of their predicating their future expendi-
tures and habits of living, upon that economical
scale, which the approaching low prices of agri-
cultural productions would soon render impera-
tively necessary to their comfort and independence.

Within the last few months wheat has fallen
from the price to which an infatuated speculation
had forced it, down to 87½ cents per bushel. In
its fall it has carried with it most of the millers
and speculators, together with several banks; so
that for some time to come farmers cannot expect
another inflation of prices, from a demand purely
speculative. Pork, which had last season touched
the lowest point in price ever before quoted in the
market, has now gone down so low as hardly to
cover the expense of barrel, salt, and freight from
the far West. Whiskey, owing in part to the
glorious temperance reform, has shared the same
fate. Indian Corn does better, owing to an im-
proved export demand for this grain. It would
seem that a kind providence has thus smiled upon
the legitimate uses of Indian corn, the moment
that man had ceased to pervert them, by "turn-
ing good to mischief!" Clover Seed, which was
supposed to be a very short crop, has, contrary to
all calculation, continued to decline in price until
its price has become merely nominal. Still, in the
midst of low prices, the independent farmer is
better off than most of the other classes of com-
munity. He has no rent to pay, no corporation
taxes to tease him weekly; so far as he is the
consumer of his own products, the price is of no
importance to him; in barter for cloth his wool is
worth as much as ever. Many of his other pro-
ducts are equally available in exchange for labor,
&c. He may not indulge in as many far fetched
luxuries, in all such imported fabrics as fashion

imposes; but his intellectual pleasures need not
be abridged on that account; as mental culture
depends on taste and enthusiasm, and not on mer-
etricious display, nor does it cost any thing but
time and study. The delightful study of nature's
laws, is in the way of the farmer's vocation and
daily calling; let him then, instead of repining at
low prices, hard times, and a lack of money, re-
flect that such privations are the only means to
bring back the nation's long lost health; that, al-
though the medicine is repulsive and exceeding
bitter, it is nevertheless indispensable to a perfect
convalescence. S. W.

Waterloo, Seneca Co. N. Y.

Grafting Cherry Trees;

A practice which has hitherto been attended with
some difficulty, inasmuch that inoculating has usu-
ally been substituted for it. In the spring of 1841,
we engrafted a few small trees by the following
process. It was in March, and rather a cool day,
so much so that a furnace of coals was necessary
to warm the wax. After sawing off the head of
the tree to within about six inches of the ground,
we took a sharp pen-knife and made incisions in
the bark, designed to be parallel and over the cleft
of the wood. The wood was then split and the
scions set in the usual way; after which I took a
fine piece of paper over which wax had been spread
and carefully applied over the wounded part. Over
this, wax may be again applied to keep it in place,
and over the whole we placed a ligature of India
rubber cut entire to keep the parts from extending
by the frost. W. B.

Mount Osceola, Feb., 1842.

A Treatise on Domestic Economy.

For the use of Young Ladies, at Home and at School.
By Miss Catharine E. Beecher,--late Principal of
the Hartford Female Seminary. Boston: Marsh,
Capen, Lyon and Webb.--1841.

This is a capital book; full of wise and useful ad-
vice, showing intelligent and exact observation, and
speaking often from experience. The objection we
have to the book is, that it contains a great deal too
much, being a sort of Encyclopedia of Agriculture,
Gardening, Horse-keeping, Health, Manners, &c.
It does not seem civil to complain of getting too much
for our money, but the book would be much more
read if it were smaller. We are not quite satisfied
with the copious darts, which Miss Beecher makes
upon other and contemporary writers. If they were
books of many years ago, out of print and unattain-
able, there might be reason for it; but there is no jus-
tice in plundering the baskets of those who are in the
market with ourselves. Fair play is a jewel, and this
lady has no occasion to shine in borrowed dresses.

Nor do we see the appropriateness in a book for
young ladies at school or at home, of treating of the
construction of barns and barn yards, cow keeping
and horse keeping; unless her book is specially de-
signed for some of the Dutch girls at the West, whom
we have seen more than once in the market driving
their teams loaded with wood. In New England we
have not yet quite got to that.

The book, however, is a good one, and we shall
enrich our columns with some useful extracts from it.
It must, we think, however, unless the author is five
lozen grove fault to Miss Beecher. We know but a
few good fellows who, if they knew what is good
for themselves, would at least try to put such a house-
keeper into her proper sphere, and compel her to joff
her maiden plumes.

Winter of 1841-2.

The winter just closed upon us, has been most re-
markable for its high temperature and the small
amount of snow, which has fallen. The wheat, as
far as we have seen it, looks well. It remains to be
seen what is the ultimate effect of such a season, upon
the crops of grass and grain. There is time for some
snow in March.

N. Y. State Agricultural Society Reports. (Concluded from our last.)

ON BUTTER.

The committee unanimously award the
1st premium, \$30, to J. T. Lansing of Watervliet.
2d " " 20, to W. Merrifield of Guiderland.
3d " " 10, to Charles Lyon of Ogdensburg.

MR. LANSING'S STATEMENT.

1. The number of cows ten.
2. Stabled through the inclement season; fed them from three to four times per day with good hay or green stalks; when near coming in, some oats, barley, or corn cracked. In summer, good pasture, with living water at all times, and plenty of salt.

3. Treatment of milk and cream before churning. Stir in the milk in tin pans; place them in a cool cellar for the cream to rise. When sufficiently risen, separate the cream from the milk; put it in stone jars, well prepared, before churning.

4. The mode of churning in summer.—Rinse the churn with cold water; turn in the cream, and add to each jar of cream put in churn one-fourth of the same quantity of cold water. The churn used is a patent one, moved by a hand crank, having paddles attached, and so constructed as to warm the milk, if too cold, with hot water, without mixing them together. The milk and cream receive the same treatment in winter as in summer; and in churning, use hot instead of cold water, if necessary.

5. Wash the butter with cold water till it shows no color of the milk, by the use of a ladle.

6. Use the best kind of Liverpool salt which the quantity varies according to the state in which the butter is taken from the churn—it soft, more, if hard, less, always taking the taste for the surest guide.—Add no saltpeper nor other substances.

7. The best time for churning is the morning, in hot weather, and to keep the butter cool till put in casks.

8. The best mode of preserving butter is in and through the summer and winter, is as follows:—The vessel is a stone jar, clean and sweet. The mode of putting it down is to put in a churning of butter, and put strong brine: let it remain on till the next churning is ready to put down, and so on till the jar is filled; then cover it over with fine salt, the same to remain on till used.

Watervliet, Jan., 1842. JACOB T. LANSING.

MR. MERRIFIELD'S STATEMENT.

Cows—Eight.

Kept.—In pasture, in summer; on hay, straw, and roots, in winter.

Milk strained into the pans, and placed in the cellar.

The cream only churned, in a Dutch churn.

Method of freeing the butter from the milk.—By pressure.

Salt used.—Liverpool salt, one ounce to the pound. Kept in the cellar, in summer, in wood.

In winter, our milk stands twelve hours; is then removed to the stove, and scalded over a slow fire to near boiling heat; the pans removed to the cellar to cool; the cream only churned.

Guiderland, Jan., 1842. WILLIAM MERRIFIELD.

MR. LYON'S STATEMENT.

TO THE COMMITTEE.—The tub of butter exhibited was manufactured without reference to this exhibition—in our ordinary way. My hours for milking are very regular. My dairy, numbers twenty cows, seven of which were milked for the first time this season. I fattened only six calves to the age of six weeks. The latter part of the winter and through the spring, my cows are fed about one peck of ruta baga each; salted once a week in winter, and twice in summer. Salting regularly, is essential, is conducive to good health; and tends to produce a uniformity in the quantity and improves the quality of the milk. The average product of my cows this season is 100 lbs. per cow, besides what is used in a family of from eight to ten persons. The shelves of my milk-house are so constructed as to admit a free circulation of air. My buildings do not require drains to my cellars. The milk is strained as soon as possible after milking, in tin pans, about three quarts to each pan; and stands until the milk is slightly turned, the time required depending on the weather.

Churning performed every day, (Sundays excepted.) When cows are regularly salted, I have never known an instance of any extreme difficulty in obtaining butter. After it is obtained, it is immediately taken from the buttermilk, all the milk worked off that is practicable at the time, salted to the taste, and

placed in a cool cellar until the next day, when the buttermilk is entirely worked out by the use of a ladle, and then packed solid in tubs.

The salt I use is rock salt. After the tub is filled, the butter is kept covered with brine sufficient to keep the air entirely excluded, especially that made during the warm part of the season. My tubs are placed in the coolest part of my cellar. Butter made and protected in this way, will keep sweet one, two, or three years.

CHAS. LYON.
Oreogathie, St. Lawrence Co., Jan., 1842.

REPORT ON CHEESE.

The Committee on Cheese report.

There were only five specimens on cheese presented for premium, that came within the rules of the Society. The cheese was generally of good quality, and creditable to the contributors and to the Society. The number of competitors was small, and a reflection on our dairy counties, which are so distinguished for the qualities of their cheese.

The specimen of D. Marvin was very good, and the committee had some hesitation in deciding the comparative excellence of this and that of H. & P. Allen of Duaneburgh, and finally decided in favor of the latter, as entitled to the Society's first premium of \$30, upon the fact that this was rather the most mild and uniform in taste and flavor.

Your committee award the second premium, of \$10, to D. Marvin of Cooperstown.

The other samples were very good, but were not of so even a quality, nor uniform in flavor; and as there was no entry for old cheese, that came within the rules of the Society, your committee recommend a gratuitous premium of \$8 to Phineas Hard of Le Ray, for a sample very fine, and deserving particular notice.

Your committee regret that in sections where so much good cheese is made, there should be so limited a number of competitors for the very liberal premiums offered. If the reward offered was the only motive for bringing forth these articles, the reason might be found in the little regard in the chaste minds of the community for that which many others have coveted; but as the great object of these exhibitions is to communicate and receive information on subjects of great interest to all, the grand and high principles which actuate worthy citizens, should lead them, by the exhibition of their own successful manufactures, to instruct, stimulate, and encourage those less informed than themselves.

A well managed dairy is one of the most valuable sources of a farmer's revenue. The product of a good cow, for a single season, in milk, butter, cheese, &c. may be estimated at more than thirty dollars.

We refer to the annexed statements of the competitors, whose success is the highest recommendation of the method pursued by them.

MESSRS. ALLEN'S STATEMENT.

Number of cows kept, eleven. Cheese made from two milkings, in the English manner; no addition made of cream. For a cheese of twenty pounds, a piece of rennet about two inches square is soaked about twelve hours in one pint of water. As rennets differ much in quality, enough should be used to coagulate the milk sufficiently in about forty minutes.—No salt is put into the cheese, nor any on the outside during the first six or eight hours it is being pressed; but a thin coat of fine Liverpool salt is kept on the outside during the remainder of the time it remains in press. The cheeses are pressed forty-eight hours under a weight of seven or eight cwt. Nothing more is required but to turn the cheeses once a day on the shelves.

H. & P. ALLEN.
Duaneburgh, Jan, 17, 1842.

MR. MARVIN'S STATEMENT.

The milk strained in large tubs over night; the cream stirred in milk, and in morning strained in same tub; milk heated to natural heat; add color and rennet; curd broke fine and whey off, and broke fine in hoop with fast bottom, and put in strainer; pressed twelve hours; then taken from hoop, and salt rubbed on the surface; then put in hoop, without strainer, and pressed forty eight hours; then put on tables, and salt rubbed on surface, and rennet in salt six days, and then weighing thirty pounds. The hoops have holes in the bottom; the crushings are saved, and set and churned, to grease the cheese. The above method is for making one cheese per day.

Cooperstown, January, 1842. DANIEL MARVIN.

MR. HARDY'S STATEMENT.

The number of cows kept is thirty-eight. Cheese

made from two milkings—no addition of cream.—The quantity of salt used was one ten-cupful to twenty pounds of curd, of common Onondaga salt. The rennet was prepared by soaking one rennet in a jar of five or six quarts, filled with salt and water. From one pint to one quart was used, according to the strength of the rennet, for a cheese of eighty or ninety pounds. The cheeses were pressed in a common wheel and lever press two days. The cheeses were taken from the press and rubbed with ammonia, soaked in strong ley, then rubbed with whey butter, and turned and rubbed daily through the season with the same.

PHILEAS HARDY.

Le Ray, Jefferson Co., Jan. 10, 1842.

REPORT ON WHEAT, RYE AND BARLEY.

The committee regret that they have been compelled to reject several applications for premiums, because the terms of the executive committee were not complied with. They regret it the more, because some of them would no doubt have received premiums—among whom were Elisha Pettibone, James Beatty, applicants for the premium on wheat, and Jay Pettibone for barley.

The first premium on wheat is awarded to George Scheffer of Wheatland, Monroe co. The amount raised was 300 bushels on 7 1-2 acres, averaging forty bushels to the acre.

The first premium on barley to John W. Turncliffe, Richfield, Oswego co., one acre yielding 53 1-4 bushels of barley. The whole expense of raising this acre of barley is estimated at \$12 50.

The committee regret exceedingly that in so large a grain growing State, so few men could be found who either deserved or were desirous of obtaining the premiums of the State Society.

REPORT ON CORN, OATS AND PEAS.

There were two applicants for premiums on corn, and your committee regret that the statements accompanying the applications were not more explicit, complying more strictly with the rules of the Society, as much useful information might be derived therefrom. They award the first premium of \$20 to William Ingalls of Volney, Oswego county, for raising 142 bushels of shelled corn on one acre of land.

And the second premium of \$10 to J. F. Osborn of Cayuga county, for raising 144 bushels weight 56 lbs. to the bushel, on one acre of land; but the mode of ascertaining the quantity was not wholly satisfactory to the committee.

There were five competitors for oats, all very highly deserving of commendation.

They award the first premium of \$15 to D. W. Weeks of Watertown, Jefferson co., for raising 113 1-2 bushels on one acre of land.

They award the second premium of \$8 to John S. Jones of East Bloomfield, Ontario co., for raising 102 1-2 bushels on one acre of land.

They recommend a premium of \$5 to Amos A. Egleston of Greenwich, Washington co., for the excellence of the specimen presented by him, weighing 42 lbs. to the bushel, it being also a large crop.

There were no applicants for peas.

The committee appointed to examine the beautiful production of art, called the *Amazon Bonnet*, exhibited to the Society by Messrs. Valentine & Eaton, No. 121 Water street, New-York, report:

That they called to their aid a number of intelligent ladies, by whose taste and superior judgment in these matters, they were controlled.

This specimen of ingenuity, combines great elegance and beauty with strength and durability. It is manufactured from the finest quality of *Manilla* grass. Six thousand five hundred fibres, woven together, will make about one hundred yards of braid, which quantity will make one of the finest class of bonnets. This material may be twisted into an endless variety of patterns, and is susceptible of any color or figure.—This bonnet can be taken apart, and cleaned with ease, and put together again, losing thereby none of its original beauty or value. Its texture and durability have never been equalled, and for beauty, it surpasses almost any thing of the kind. The material from which it is manufactured is imported, but is of small value compared with the labor in braiding the same. If it comes into general use, it will open a field of productive industry to many ingenious females and children of our populous towns. We commend this bonnet to the patronage of the American ladies. Benevolence to a large class of their own sex in destitute circumstances, should prompt them to encourage the production of an article that will afford employment, and consequently comfort to indigent but worthy females.

REPORT OF THE TREASURER, E. P. PRENTICE. The reports of the Society the last year, were as follows: Balance in treasury, at last meeting, \$36 87
From right life members, \$50 each, 400 00
Seven subscriptions, \$25 each, 175 00
Two " " \$20 each, 40 00
Eleven " " \$10 each, 110 00
Twenty-three " " \$5 each, 115 00
From members, and other sources, 442 82
From Comptroller of the State, 700 00

\$2,029 69
Paid premiums, expenses, &c, 1,065 46

\$961 23

From which is to be deducted about \$200 for premiums awarded, but not paid.

The treasurer also reported that a quarter of one Mr. Fuller's tax on, presented to the Society by Mr. Riser, had been added for \$24 97, which, added the above sum, would leave a balance in the treasury of about \$800, after the payment of all demands against the Society. The committee appointed recommending a place for holding the annual Show, after fixing Albany or its vicinity for 1842, recommend at the Show for 1843 be held at Rochester.

On motion of Dr. Goodsell, of Utica, Resolved, That this Society recommend to the anti agricultural societies to use their exertions to establish town societies.

On motion of J. B. Nott, Esq., Resolved, That a committee of five be appointed to report at the next meeting on the propriety of establishing an Agricultural Board for this State. [Committee—Messrs. NUTT, VAN BRUNEN, BELKMAN, DEXOW and VIELE.]

Amendments to the Constitution.

On motion of J. B. Nott, Esq., Resolved, That no article of the Constitution can be altered or amended, without a notice of being given one year before such alteration. Mr. FULLER gave notice that at the next annual meeting of the Society, a motion will be made to amend the Constitution, so that presidents of county agricultural societies shall be ex-officio members of the Executive Committee of the State Society. The Society then adjourned, sine die.

For the New Genesee Farmer

Farmers' Gardens.

What higher authority can we quote than a lady? Who has better taste, more refined sensibilities, a keener judgment or nicer observation, than the female part of community? Happening to meet one who possesses the excellencies of her sex in an eminent degree, the other day, we heard her remark that the farmer who failed of having a good garden, failed in economy, and not only that, but he was himself off from many of the comforts of life. Arguing from the practice of most farmers in our country, we must suppose they are ready to exclaim "this is a hard saying," but let them enjoy the comforts and luxuries of a good garden for one year, let them count the actual cost in labor and expense it requires, and give a careful credit to its proceeds, and if they do not find it the most profitable investment of their estates, we will—concede that their experience has been different from their own. Though our garden is done up in a fall way, yet we find it not only an invaluable appendage to our affairs, but with our present ideas on such things, one of absolute necessity; for we cannot forego the delicacies of the rich tomato, or the tender vegetable it affords in the hot summer days, any more than we can our daily bread. And the cauliflower, who that ever tasted of them would willingly suppose that a future season could pass without furnishing himself with an abundance. As many who profess to admire them do live, year after year, without making a single effort for their production. They are almost as easily raised as common cabbage. Like them, they should be sown for early use in a hot-bed, an article that every one who cultivates a small patch of earth, should prepare; for by sowing in them, a month or two weeks may, without diminishing in any way

from the general reign of cold weather, be added to our short summers. They may be got up very cheaply. One with half a dozen lights of glass will do to prove their utility, and these lights may be set in any old sash, or in a cheap frame, which any one gifted even with a small measure of mechanical skill, may manufacture in the leisure time of winter, and by so doing, heavier bars and frames may be made, than is usual in common sash, which will give them a firmness that their exposure requires. If cheapness is studied, the box may be made of slabs, with the edges squared so as to set close; on this, the sash should lie at an angle of about 45°. In our climate, the best location for the hot-bed is at the south end of a building, for there, the cold northerly winds are broken off and the sunbeams reflect, as well as fall directly upon it, thus proving that in cultivation of plants, as well as animals and intellects, reflection is as useful as more direct action.

But farmers who would have every part of their garden perfect, should have larger hot-beds than the one we have quoted or, perhaps, what would be better, have several of the size alluded to, for then different vegetables can be started at a distance from each other. These small ones may have, among other things, a hill of melons, or of the exotic squashes planted in the centre of them, if located in different parts of the garden; and when plants, like the cauliflower, tomato, or any of those designed for transplanting are removed, the ground, well fitted for their growth, remains for the nourishment of the vine. By having them in different parts of the garden in different years, it may be kept in a very rich condition, by the well rotted manure they contain, and which, by the second year becomes, through the fermentation of the first, free from the seeds of foul weeds, so very annoying in a garden. Hot-beds should be made in March, and covered in severe weather by an old rug.

W. B.

Mount Osceola, 1842.

Manure for Gardens.

We have tried a variety of kinds of manure for a garden, and these kinds in a variety of forms, and as far as our experience warrants an assertion in favor of any particular kind, we must give a decided preference to *scamp mud*, or muck. One argument in its favor is, that it seldom produces weeds. Another, that it contains so much vegetable matter in a decomposable state that it is easily brought to operate as the food of plants. It also, from the slowness of its decay, continues its effect longer than most other manures. Its cheapness also commends it, for all it costs is the mere getting it from the pond hole, which will be sure to fill its treasury before a new draft is necessary. In order to have it *prime*, it should be placed in a pile for a few days, and ashes or lime mixed with it, and subjected to workings until the lumps are all reduced, and the two simples thoroughly compounded. It may then be put, half a shovel full will answer, in the hill for melons, cucumbers and squash. For radishes and the like, we use it as a top dressing.

W. B.

Mount Osceola, Feb., 1842.

Advantages of the Climate of the United States over that of England.

Your correspondent, W. Garbutt of Wheatland, gives to the English farmer the advantage in length of season over the farmer of the United States, without even adverting to the very great advantage we have, in the superior stimulating power of our much warmer and more kindly season of vegetation. If by some change in the Solar System, the

power of terrestrial magnetism, or some involution in nature's course, the soil of England could be so far stimulated by the sun's rays as to produce Indian corn to perfection, should we any longer hear of her "starving population," reduced to live on the miserable bread made of damp mouldy grain? It is true that England has less severe cold weather and a shorter winter than we have; but look at the slow process of vegetation there as compared with that of the United States; her late harvest crowded into the short, cloudy, and even wet days of autumn, and it is not surprising that her corn is damp and mouldy. What would become of our ease-loving farmers if they had to encounter the cold, sour, wet climate, and slow vegetation of that country called merry, not sunny, England? Would they not be reduced from bacon and corn bread, to turnips and pea soup, from the delicious wheaten loaf and hot rolls, to oatcakes and potato broth?

Mr. Garbutt says that roots cannot be cultivated in this country to the same extent, *adventuringously*, as in England. Very true, but then does our Indian corn, that thrifty precocious king of edibles (it being both food and fodder, oil and sugar,) render the like extensive cultivation of roots unnecessary? But we deny that roots may not be as easily cultivated in the United States as in England. If our more sunny champaign country is not as well suited to the turnip and potato, as cool and misty England,—our early planted sugar beets never grew in greater perfection with us, than during the last summer, the hottest and driest season we have had in many years; and there is little doubt but that one acre of sugar beets is worth two acres of turnips.

We fully agree with Mr. Garbutt that it would be folly for our farmers to follow the rural economy of England in all its variety, but for very different reasons than a part of those set out in his otherwise interesting and well written article.

Waterloo, N. Y.

S. W.

From the Farmer's Monthly Visitor.

Great Yield of Potatoes.

In 1839, the late Major Caleb Shaw planted potatoes (the large round red) on several patches of ground in Suncoek village in the town of Pembroke; he planted them without assistance, and hoed them three times himself. They were planted in drills, one piece (cut) every ten inches, and when he dug them in the fall, they were weighed, and he proposed, from the result, the following questions to Hon. John Vose, then preceptor of Pembroke Academy. I find the questions and answers among some of his papers, and send them to you.

QUESTIONS.

1st portion, 165 square feet produced	126 pounds.
2d " " 147 " " "	138 " "
3d " " 18 feet square, " "	384 " "
4th " " 43 " " "	1435 " "

ANSWERS.

1st portion, per acre, 32,670 lbs.	605 bushels per acre.
2d " " 41,745 " "	773,055 " "
3d " " 51,626 2 3	956,349 " "
4th " " 38,906 " "	426,05 " "

The above results were brought about by Mr. Brown; of their accuracy, I have examined them, so as to be satisfied they are correct. I witnessed the progress of the growth of the potatoes, and the average weight of them was 54 pounds per bushel.

JOHN VOSE.

Typhus Fever.

It cannot be too widely known that nitrous acid gas possesses the property of destroying the contagion of the typhus fever, and certainly of preventing its spread. By the following simple method the gas may be produced at a very trifling expense.—Place a little powdered sulphate in a saucer, and pour on it as much oil of vitriol as will cover it; a copious discharge of acid gas will instantly take place, the quantity of which may be regulated by lessening or increasing the quantity of the materials.—*English paper.*



ROCHESTER, MARCH, 1842.

To Correspondents and Readers.

We cannot say with one man on receiving his friends that we have too much company for our chairs, but we sincerely regret that we have not chairs enough for our company.—Our limits and the late hour at which several communications were received compel us to postpone them until our next.

J. E. T.'s most welcome essay is in type.

C. N. B.'s valuable article on Winter Butter is in type.

J. W.'s excellent letter on the cultivation of Hemp will be in our next.

A "Subscriber's candid remarks on Improved Stock and the sound views of a "Friend of Improvement" are both received with respect.

Inquiries as to Gypsum, W. S. T. on Maple Sugar, a second letter from our friend Garbutt, our friend M.'s communication on choked cattle and Ruta Bege, valuable articles on Furin and Cottage Buildings, on Ploughing, on Protective Duties and Experiments in Farming, with various others, are of necessity laid by. But our friends may under these circumstances safely anticipate a choice sheet for April. Having said so much for ourselves in this number, we shall in our next yield the floor to our betters. In the mean time we beg our friends not to think we overlook or forget them. Let them turn in their grist; and so long as they give us clean grain, without any ches, or cockle or smut, as they have done, we'll do our best to turn out as good flour as any mill with the Rochester brand.

Broom Corn and Madder are waiting a place in our next.

Mr. Weddle's sale ought to command attention. There are some animals of extraordinary excellence.

Charms of Editorial Life.—Agricultural Inquiries.

January 22, 1842.

MR. COLMAN—

Sir—Having been somewhat acquainted with your views upon agriculture while you was in Massachusetts, and learning that you now stand at the helm of the Genesee Farmer, I think to extend my acquaintance with you, by pursuing your monthly periodical.

I have a few questions to lay before you, hoping for some valuable information.

My farm consists of about fifteen acres of a yellow loam mixed with sand. I have occupied it one season last, and find that rye, corn and potatoes, may be raised to good advantage; also carrots and sugar beets. But I am destitute of an orchard. My neighbors, who are in the same condition, tell me I must submit to it, which I am very unwilling to do. I therefore hope to learn from your paper your opinion, whether fruit trees will be likely to grow and flourish on my land—the best time for transplanting them—the manner in which it should be done, &c.—the treatment they should receive after, and the kind of manure most adapted to their growth.

I wish to know the best manner of curing hams, and of preserving beef from fall to spring, and for summer use.

Permit me to extend my inquiries a little farther. Be good enough to inform me of the best kinds of

swine, and manner of rearing pigs, and the treatment of sows suckling them. Also, how I can best keep bees through the winter and manage them in summer to get the best profit from them.

Yours respectfully,

Remarks.—Now here is a pretty kettle of fish to fry, from Connecticut river. What shall we do? The editor of the New England Farmer recently very politely remarked, that the late Agricultural Commissioner of Massachusetts 'could put more questions in a given time than any other man of his acquaintance.' But the late Agricultural Commissioner now acknowledges himself fairly beaten. Why could not our correspondent have put to us at once all the questions in the Westminster Assembly's Larger Catechism?—Why could he not have asked us a few more questions in natural history; as for example, why Niagara Falls do not stop running? How Connecticut river ever squeezed through Mount Holyoke and Mount Tom? How the trees ever got upon the top of Sugar Loaf? Why black-wooled sheep eat less than white? Whether flocks can be best caught in a common steel trap, or as the boys catch pigeons, by putting a little salt on their tails? and so on to the end of the chapter?

We should like to be near at hand when our friend desires a visit from his family physician; and should not be much surprised if some such application as this takes place. Doctor! when you are passing my house *just call in in a friendly way*, and see my wife, she has had now for some time a bad cough and pain in her side; and I want, at the same time, you should look at Nancy's finger, she has got, I believe, a felon upon it; and do ask for John and tell us how we shall remedy his club feet; and I hear, Doctor, that you can cure squint eyes, and I wish you would see what can be done for Tom, who seems always to be trying for his life to see whether his nose is on or off; and by the way, Doctor, if you have any genuine matter, I should be glad to have all the children vaccinated at the same time; and while you are there, Doctor, I wish you to look at my old horse, who seems to have a film over one of his eyes, and I wish to know how to get it off; and at the same time, I wish you to examine the milk of our heifer and let me know if you think there is any danger of our getting the milk sickness which I have read about in Indiana; and one other thing, Doctor, I came near forgetting, about which I very much want your advice, that is whether our baby's porridge should be heated in a tin dipper or an iron skillet.

All this, too, the man expects to get out of the Doctor without any fee, because he only asked the Doctor to call as a friend sometime when he should happen to be passing by the house.

Now we certainly mean nothing disrespectful to our good friend, but if it was the feather that broke the camel's back, what is to become of us when the whole bed, tick and all, is thrown upon ours? Perhaps we should save trouble in the case, were we to recommend to our correspondent to apply where he will find all the information he desires at his fingers' end. There are only twenty quarto volumes of the N. E. Farmer, let him read them; there are only eight volumes of the Albany Cultivator, let him read them; there are only four volumes of Hill's Family Visitor, he can read them as well as not; there is the old Genesee Farmer and the New Genesee Farmer; these, without reading the advertisements and the price currents, might stand him a little while; and then there is a little (not exactly pocket) volume, called London's Encyclopedia of Agriculture, which might occupy a few leisure evenings and assist him essentially in the management of his farm of fifteen acres.

But to be sober. Our friend we hope will pardon us for amusing ourselves at his expense. We really

have no serious objection to his inquiries. We like his curiosity. We will do every thing in our power to encourage and assist small as well as large farmers, and if he will have patience with us, we promise that every one of his questions shall have due attention, and so of as many more as he will put to us.

Withdrawal of Patronage.

We are honored with a letter of a different description, in which a respected friend complains that we admit the communications of a valued correspondent, S. W., whose views do not agree with his on the subject of protecting duties, nor indeed with our own.

But he says "he handed our January number to a brother farmer hoping to induce him to become a subscriber, but on returning it he objected on account of S. W.'s communication, saying 'that any paper advocating British interests, he was not disposed to patronize.' My views are the same, and I shall cease to be a subscriber if such articles are permitted to appear."

Now we beg to say confidentially and respectfully to our friend, that his threat has not scared us out of a night's sleep, and that whenever he thinks proper to withdraw his patronage from our humble publication, we shall be most happy to return his fifty cents. Sell our liberty of speech or discussion on any subject and all subjects we shall not, nor abate it one hair's breadth; if our friend wishes to know our creed on the subject of protecting Home Industry, he will find it in this very paper in the Resolutions of the Rochester meeting of the 16th ult. These we think he will pronounce orthodox.* But we are happy to hear the other side. Our great object is *truth*, and the only certain road to truth is free inquiry and discussion. We are willing, therefore, ourselves to hear and to let our readers hear what may be said on both sides of this great question.

We do not consider it at all a party question, but a great national question. We never will present it as a party question, or suffer, so far as depends on us, party considerations to be mingled with it. It is a political question we admit; and a question which concerns the farmers, the agricultural interest of the country certainly as much, perhaps more, than any other class in our community; and it is one of the most important questions in which they can take an interest.

Our paper shall never be made sectarian or party in any sense, even on the vexed question whether wheat can be changed into chess or chess into wheat, but it shall be open to the well expressed opinions of intelligent men, on any subject concerning directly or indirectly the agricultural interest. The communication signed S. W., in the January number, was admitted without our knowledge, and before we had reached Rochester. Yet upon review, we cannot see why it should have been excluded. Since the time we have received a communication from S. W. on another subject, evidently written with the feeling of a partizan, and reflecting upon one of the great parties of the country, which we notified him could not be admitted. Our columns shall not be stained by personalities or party reflections or discussions; but if we must lose our subscribers because we admit opinions or discussions, which do not accord with our own, we will bid every one of the 20,000 farewell before we will budge an inch. We have no fears but that truth and patriotism will here triumph; and we ask our good friend to review his decision and come out in his true character as the friend of universal liberty; and at once lend the aid of his good sense and his sound judgment, matured by much experience, in showing the farmers who read the New Genesee Farmer, how deeply concerned are the wool-growers

*These Resolutions are unavoidably deferred till our next

runners of our country in the protection of domestic industry. We have another word for his private ear: low happens it that a man brought up in a free country makes the most arbitrary of slave drivers whenever he goes South; or to come nearer home, how happens it that an old bachelor enjoying for forty years the largest liberty, should be disposed in any form, to encroach upon the liberty of other men?

Heartaches—perhaps.

We have another letter signed "Adolescents," inquiring what has become of Annette, and whether there is to be no answer to Helen's communication. Now what a luckless sight are we. Who is Annette? "Oh I where, and oh I where has this Dalcinea fled?" We would answer at once if we knew. And what is Helen's communication that she addressed to us? Was it in some tender strain, some gentle whisperings of kindness, some kind congratulations of some benevolent soul on our arrival in this Western Paradise? We have not seen it. Very likely our partner, a good-for-nothing celibate, when he took it from the Post Office, felt that it was warm, and pocketed it at once.

Great Sale of Blooded Stock.

The proprietor having disposed of his farm, will sell by Public Auction, at his residence in Greece, adjoining the Erie Canal, 6 miles west of Rochester, N. Y., on Tuesday, the 29th of March, 1842,

NINETY HEAD OF CATTLE, FOURTEEN HORSES, THREE HUNDRED SHEEP, FIFTY HOGS.

Comprising the whole of his full blooded and grade cattle, of the Improved Durham Short Horn breed, which includes the celebrated Bull "American Comet," who received the first premium at the exhibition of the Monroe Agricultural Society, 1841. Also the beautiful Cow, "Gazelle," 4 years old, now near calving, which has taken the premiums of the said Society for the last two years, with her two heifers, Hebe and Lucilla.

Also, three Stud Horses, sired by imported Turk. The Sheep are of the improved Leicester, embracing 14 Bucks of full blood, with a fine flock of ewes in lamb, and about 100 wethers. The hogs are Leicesters and Berkshires, all very superior.

The above are the finest selection of improved stock ever introduced into this country, and will afford an unusual opportunity to those who wish to improve their breed.

THOMAS WEDDLE.

Rochester, February 18th, 1842.

PEDIGREES OF CATTLE.

BULLS.

"AMERICAN COMET,"—white, calved April, 1838, is by Charles, alias Rover, (1816) dam Primrose, by Pioneer, (1321) gr dam, Prudence, by Candour, (107) gr gr dam by Ketton, (346) gr gr dam by Expectation, (247) gr gr gr dam by Col. Trotter's Magnum Bonum, (2882) gr gr gr gr dam by H. Chapman's Son of Pouch, (122) gr gr gr gr dam by Ralph Grimson's bull, by Charges, son of Favourite, (382) gr gr gr gr gr dam by son of Dalton Duke (18).

HEBE—calves 1840, by Am. Comet, dam Miss Grizzle, by Charles, alias Rover (1816).

CALVIN—roan, calved 1840, by Echo, own brother to Am. Comet, dam, Brilliant, from the Holland Company's Importation.

PHANTOM—light roan, calved 1840, by Echo, dam by Neptune, imported by T. Weddle.

WHITELOCK—5 years old, a Durham Short Horn.

HERO—white, calved 1841, by Am. Comet, dam, Comely, from Jenkin's stock.

TROTTER—roan, calved 1841, by Am. Comet, dam, Mountain Lass, by imported Neptune.

ECLIPSE—white, calved 1841, by Am. Comet, dam, Lilac, by Charles, alias Rover (1816).

PIZZA—light roan, calved 1841, by Am. Comet, dam, half blooded Durham.

FRONTIC—roan, calved 1841, by Am. Comet, dam, Peggy, by Roman, gr dam, imported Alderney.

COWS.

GAZELLE—roan, calved 1837, by Charles, alias Rover, (1816) dam, Crocus, by Romulus, (2563) gr dam, Prize, by Malbro, (1189) gr gr dam, Tulip, by Regent, (544) gr gr gr dam, Primrose, by North Star, (459) gr gr gr dam by R. Collins' White

Bull, gr gr gr gr gr dam, bred by Mr. R. Collins' Brampton County, Durham.

HEBE—white, calved 1840, by Comet, dam, Gazelle, by Rover, (1816) gr dam, Crocus, by Romulus, (2563) gr gr dam, Prize, by Malbro, (1189) &c.

LEICESTER—roan, calved 1841, by Am. Comet, dam, Gazelle, by Rover, gr dam, Crocus, by Romulus, (2563) gr gr dam, Prize, by Malbro, (1189) &c.

LILAC—roan, calved 1839, by Rover, dam, a pure Devon.

MILKMAID—red and white, calved 1839, by Leo, dam, a celebrated milker.

MARTHA—roan, calved 1837, by Rover, (1816) dam, a pure Devon.

MISS GRIZZLE—calved 1838, by Rover.

PEGGY—red and white, calved 1840, by Roman, dam, an imported Alderney.

FAIRY—roan, calved 1841, by Am. Comet.

MOUNTAIN LASS—calved 1839, by imported Neptune.

MATILDA—Full Blood, dam, imported Matilda.

CLARA—light roan, calved 1840, by Am. Comet, dam, a pure Devonshire cow.

CHARMING—roan, calved 1841, by Am. Comet, dam, Red Rose, a beautiful Devonshire cow.

MAY FLOWER—white, calved 1841, by Am. Comet, dam, Patty, by Rover, gr dam, imported Alderney.

BLOOM—red, calved 1840, by Roman, dam, Red Rose.

ORFAN—calved 1840, roan, by Roman, dam, Prudence, by Rover.

FANCY—roan, calved 1842, by Am. Comet, dam, Miss Whitefoot, by Roman.

GAILY—roan, calved 1842, by Am. Comet, dam, Red Rose.

DUTCH—white, calved 1842, by Am. Comet, dam, Mardie, by Rover.

JANNETT—white, calved 1842, by Am. Comet, dam, Mountain Lass, by imported Neptune.

GEY—roan, calved 1841, by Am. Comet, dam, Brilliant, from the Holland Company's Importation.

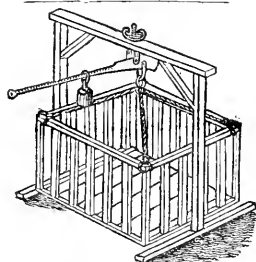
LOVELY—roan, calved 1838, by imported Neptune.

CLOPATRA—a Durham Short Horn, of superior milking qualities.

MOSS ROSE—roan, calved 1840, by Am. Comet, dam, Holderness.

Also, thirty Milch Cows, two yoke of Working Cattle, several young steers, and a number of half blooded Durham Heifers, of a very superior description.

|| A convenient credit will be given to purchasers.



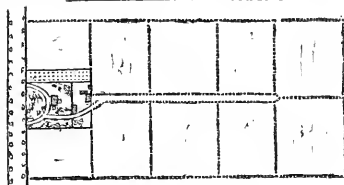
Weighing Machine.

In a late number of this Journal some remarks were made on the importance of the frequent and regular weighing of domestic animals, to determine the best food and management for them. Machines of large size, such as for weighing loads of hay, large cattle, &c. are costly; and for smaller objects, as calves, sheep, and pigs, a cheap and good contrivance is represented in the annexed figure. It consists of merely a steel-yard, with the hooks removed, so that it may be suspended to the cross beam of the frame and not twist to one side, and a light wooden cage, for containing the animal, suspended beneath. One side of this wooden cage opens as a gate, and the animal may be either driven in or decoyed by food. If the frame cannot be so suspended as not to turn or twist, the upright posts of the frame should be so far asunder as not to touch the corners of the cage. With a large steel-yard, and a high frame to prevent the floor of the cage from being thrown too much in an inclined position

when the animal is not precisely in the centre, cattle of several hundred weight may be weighed. In the latter case however, it is better to have a strong lever, for elevating the cage, resting on a fulcrum near the upper end of one of the posts, and attached by a hinge joint to the extremity of the iron rod which passes through the cross beam. This lever may be removed when not in use, and the machine be placed under shelter from the weather. In weighing smaller animals, the lever may be dispensed with, provided the cage is several inches from the ground, the animal being made to enter while the open side touches the ground by a prop placed under the opposite side.

Such machines are not only of great value whenever purchases or sales are made, but still of greater, in determining the best modes of feeding and fattening, which indeed constitutes a very large part and often the greatest part of the expenses and profits of farming.

J. J. T.



Laying-out Farms.

In a late number of this paper, I offered some remarks on laying-out farms, and I propose occasionally to give some illustrations of the remarks there made. The annexed figure represents a farm of the simplest kind—a right angled parallelogram, where the land is nearly level—a form which very often occurs. It lies on one side of the public road, the sides of which are planted with forest trees. The first enclosure in the middle, has the dwelling-house nearly in its centre, and is planted with trees, for the sake of shade, ornament, and domestic attraction and enjoyment;—these trees are not planted "all in a row," but in the graceful and picturesque manner which distinguishes a beautiful natural landscape. Back of the house, is the barn, yard, and other out-buildings. On one side, are the fruit, kitchen, and flower gardens, the lot containing them being of an oblong form, for the more convenient separation of portions of the fruit garden or inclosing pigs, the sovereign remedy for the attacks of the curculio. The orchard may occupy either or both of the lots on each side of the house. The remainder of the farm is divided into fields nearly square, each one of which should be entered by a good, easy-swinging gate, from the lane which runs through the middle of the farm. The number of fields may be increased by making them narrower, without at all changing the position of the land. No farm over sixty acres, except it be of some unusual nature, should be divided into less than ten fields, as the importance of good rotation, and a full command of those fields at all times, and protection from the inroads of cattle, is far more than the expense of additional fences, or the land occupied by them.

The importance of a good lane, must be obvious to every farmer; many, being destitute, are obliged to draw their grain, hay, roots, manure, fire-wood, &c. over ploughed fields to the great fatigue of the teams, or over wheat fields destroying the crop, or over meadows cutting up the grass, or through pastures destroying the turf, all at an unnecessary expense of many hard-earned dollars a year. A good lane, made level by working down asperities, and rendered hard by gravelling or otherwise, would at once obviate these difficulties; and the trouble and vexation often experienced in driving ungovernable cattle and carts from one field to another, to the great detriment of the intermediate crop, would be entirely avoided.

J. J. T.

Silk Culture in New England. From Colman's Fourth Report.

I have the greatest pleasure in laying before my readers the annexed communications on the culture of silk, from my respected friend JAMES DEANE, M. D., of Greenfield, Mass.

They are exact, perspicuous, direct, and conclusive. It would be difficult to ask more in order to determine the question of the profit and success of this branch of domestic economy or household industry, if so it may be called. I cannot persuade myself that, now the proxysm of the multicausal insanity is over, they will not attract that attention from the farmers, which their intrinsic importance claims; and from the admirable manner in which they are drawn up, they cannot fail to be read with interest. I commend them especially to the farmers' wives and daughters, if I am not presuming too much in thinking they will honor any portion of my pages with a perusal. Will not they take an interest in the history of the wonderful and disinterested labors of those humble operatives, to whom they owe so much that is useful and beautiful, ornamental to their persons and gratifying to their taste,—those delicate and exquisite fabrics which were once the exclusive property of the palace, but are now within the reach of the humblest cottager?

MR. COLMAN.—

DEAR SIR:—The past summer, remarkable for the duration and uniformity of its high temperature, has been favorable to the cultivation of the mulberry tree, but from causes not sufficiently investigated, the rearing of silk worms has been attended, all over the country, with a succession of mishaps and disasters. The larvae composing my own stock were perfectly healthy, and commenced winning their cocoons on the twenty-eighth day, and as in the experiment I deem myself to have been successful, it is with true pleasure that I am enabled to present you a detailed statement of operations, together with some reflections naturally suggested by an acquaintance with this great subject.

There are several absolute changes in the life of the precious silk worm, which require for their complete development just one year, and as each change is regulated by peculiar principles, a thorough understanding of them all is essential to the success of those who undertake its artificial management. These changes embrace four distinct periods, the last terminating where the first began, to wit: the quiescent state, or that of the egg; the state of the larva, or of nutrition and the formation of the cocoon; the chrysalis state, or that intervening between the worm and moth; and finally the state of the moth, or that of reproduction. The so divisions are natural boundaries, and they cannot be too well understood.

The period occupied by the egg is about ten months, and when left to the action of natural causes, terminates in the spontaneous production of the young in aet, reciprocally with the first growth of its appropriate plant, when spring has far advanced. But to render exotic mulberry which have been retarded by annual transplantation, available, it has been necessary to retard in a corresponding degree the hatching of the egg. This can only be accomplished by subjecting it to the continued action of low temperature, somewhere between the freezing point and the 45° of the thermometer. This state should commence before the egg has felt the slight influence of the vernal heat, and the method I adopt is to deposit early in March in a tin box, containing the eggs, in contact with ice, and so keep them until wanted. In this way they have been known to keep two years and hatch well.

The eggs employed in my experiment were removed from the ice-house on the 29th day of July, and as an intermediate state between a low and high degree of temperature, they were placed in a cool cellar for a few days, and then subjected to the

TEMPERATURE OF THE HATCHING-ROOM.

1st day,	2d day,	3d day,	4th day,	5th day,	6th day,
72°	73°	73°	74°	73° to 74°	76° to 78°
7th day,	8th day,	9th day,	10th day,	11th day,	
74° to 76°	76° to 78°	75° to 78°	75° to 78°	76° to 78°	

Nearly the entire number hatched vigorously on the tenth and eleventh days, and all others were rejected. It will be noticed that the temperature was gradually elevated about one degree each day during the hatching process, and was maintained as nearly as possible to 77° during the subsequent feeding state, the essential features of which are presented in the following table.

Days of hatching.	Age of the worms.	Feeding state.	No. of worms.	Splice.	Age, out of.	REMARKS.
1 Aug. 3.	1st day of 1st age.	76° to 80°	12	5 feet.	2 hours.	Leaves chopped fine.
2 " 4.	" "	76 to 82	12	" "	do	" "
3 " 5.	" "	78 to 82	12	" "	do	" "
4 " 6.	" "	76 to 81	12	" "	do	Weather hot, with frequent thunder showers and a rain storm. Temperature occasionally regulated by stove.
5 " 7.	" "	74 to 80	12	" "	do	" "
6 " 8.	1st day of 2d age.	77 to 79	12	5 lbs.	4 hours.	Feed once during each night.
7 " 9.	" "	73 to 78	12	" "	do	" "
8 " 10.	" "	73 to 78	12	" "	do	" "
9 " 11.	" "	74 to 80	12	" "	do	" "
10 " 12.	" "	76 to 81	12	" "	do	" "
11 " 13.	" "	76 to 80	12	" "	do	" "
12 " 14.	1st day of 3d age.	77 to 82	12	5 lbs.	5 hours.	No. of worms 29,000. (Specimens)
13 " 15.	" "	77 to 82	12	" "	do	Weight of leaves, 1333 lbs.
14 " 16.	" "	77 to 82	12	" "	do	Weight of cocoons, 100 lbs. (chrysalis not stifled.)
15 " 17.	" "	77 to 82	12	" "	do	" "
16 " 18.	" "	77 to 82	12	" "	do	" "
17 " 19.	" "	77 to 82	12	" "	do	" "
18 " 20.	1st day of 4th age.	76 to 82	12	5 lbs.	6 hours.	Aggregate of time employed, 16 days—12 hours to the day.
19 " 21.	" "	76 to 82	12	" "	do	" "
20 " 22.	" "	76 to 82	12	" "	do	" "
21 " 23.	" "	76 to 82	12	" "	do	" "
22 " 24.	" "	76 to 82	12	" "	do	" "
23 " 25.	" "	76 to 82	12	" "	do	" "
24 " 26.	1st day of 5th age.	75 to 79	12	5 lbs.	one day.	" "
25 " 27.	" "	75 to 79	12	" "	do	" "
26 " 28.	" "	75 to 79	12	" "	do	" "
27 " 29.	" "	75 to 79	12	" "	do	" "
28 " 30.	" "	75 to 79	12	" "	do	" "
29 " 31.	" "	75 to 79	12	" "	do	" "
30 " 32.	" "	75 to 79	12	" "	do	" "
31 " 33.	" "	75 to 79	12	" "	do	" "
32 " 34.	" "	75 to 79	12	" "	do	" "

The silk worm being a cold blooded insect, receiving its temperature from the atmosphere, the necessity of keeping up a suitable degree of warmth will at once be perceived. The degree of temperature has been found by experience to be not far from the numbers indicated in the table, and it must be maintained not only through the feeding and spinning state, but also through those of the chrysalis and moth. It is indispensable, for in all the mysterious changes of the silk worm heat is the exciting agent; it is nearly in a state of torpor between 50° and 60°; yet it will move, but the time required will be twice as long, and the amount of silk not half so much, as when stimulated by a congenial degree of heat. Near the temperature of 77°, under active management, it completes its feeding state in 24 to 33 days, its spinning state in 5 or 6 more; it is a chrysalis about two weeks, and a moth one, during which time the sexes unite, and the female laying two or three hundred eggs, the circle of transformation is for the first time broken by death.

French writers, as I put an ounce of eggs to contain 40,000, but from numerous calculations I have never found the number to exceed 25,000. In this experiment I hatched an ounce, and the number of worms was not greater than set down in the table. The novice is always over estimating numbers. I sified the chrysalis with empor, and approve of the method as being cheap, expeditious, and perfectly efficacious, and at the same time not hardening the gum of the cocoon, which consequently reels with uninterrupted freedom. Miss Burton, who reeled my silk excellently, preferred cocoons treated with empor to those not stifled, because the dead chrysalides gave her much less annoyance in the heated water of the

basin. Reeling silk is a beautiful process that never fails to excite admiration, yet it is accomplished with ease, and with a little practice and steady perseverance, a young woman will reel a bushel of cocoons, yielding a pound or more of silk, in a day. The art is not however, yet carried to such perfection as to enable us to make the most of our materials, for all but expert reelers waste a considerable portion.

The actual amount of labor required in the first ages of the silk worm is very small, it is an agreeable noime. But when immense numbers pass into the fifth age, the labor, difficulties and cares become great and incessantly greater, and for the first time we are sensible of the enormous service which the establishment demands. Then we discover the obstacle, and it is like a mountain; we suddenly find ourselves surrounded by myriads of voracious insects that double their dimensions daily. Dirt and filth rapidly accumulate, signs of putrescent decomposition begin to appear, the weather is perhaps moist and sultry, and finally we perceive indications of disease and confusion. These considerations teach us the necessity of preparation, and of perfecting our system with prudent foresight.

The sudden and enormous demand of labor in the fifth age, is the great barrier to an unlimited production of silk. It is a great degree prohibits the application of capital, and the culture of silk naturally becomes an incidental branch of agriculture. Whoever discovers the method of dispensing with the tedious labor of this age, will confer everlasting obligations upon his country. That it will be systematized, and even in a great degree abolished, I think no one who is acquainted with the subject can reasonably doubt.

We have recently heard much complaint of Onondaga fine salt. Hams, after being five weeks immersed in strong pickle, were found to be fresh in the centre. Lime is often used by the salt boilers to discolor the sulphate of iron contained in the brine; this enables them to do without *bittern* pans, which are used to take out from the bottom of the kettle the red sulphate and also the ochereous substances deposited by the brine; this lime or the other precipitates, form a coating on the salted meat and prevent the thorough absorption of salt. Hence the frequent complaints of spoiled meat, when salted with Onondaga fine salt. We would advise all those who have old brine, to scald it and skim it, if not sour; if there is no blood in the pickle, a little fresh blood will cleanse it thoroughly, and render the brine pure, strong, and *caustick*. S. W.

Queries to a Terrified Editor.

We had supposed ourselves fairly out of the woods, when we replied to our Connecticut River friend's queries, varied and variegated as they were; but alas! how vain is all human confidence! We have heard of a man being in a peck of troubles, which has been ordinarily considered as the *extreme* of human affliction; but who ever heard of a lurch coming at once? We are reminded rather too seriously of the poor Frenchman who fell overboard, before he had quite learnt the force of the English auxiliary verb; "I *will* be drowned, said the poor dog, and *nobody shall* help me." Now look at the list honestly made up!

1. How shall we prevent gooseberries from moulding? Move the bushes once in three years, and grow them on a single stock.

2. Will my soil do for hemp, or shall I raise broom corn, and how shall I raise hemp, and how shall I raise broom corn? From a noble fellow who never chooses to dine at a public house at another man's expense. Answer next month.

3. How will you kill Canada thistles? Two years careful planting and hoeing, and persuading your neighbors to do as they would be done by.

4. Can you sell my Berkshire pig? Not without a description. What are their developments?

5. Do let us know how you cure the measles in swine? Brimstone and charcoal frequently, before and after they get the disease.

6. Give us a title on Horticulture. What is the best time and mode of transplanting fruit trees?—What are the best kinds of fruit trees; of apples; of pears; and what are the best modern treatises on Horticulture, and where can they be found? Call at M. B. Bateham's store, Rochester. See advertisement.

7. What is the best plan of a Hot-air Furnace? * what machine will give the most heat with the least wood; what would it cost at Chicago or St. Louis? The tight-iron stove or Arnot's patent. Can't answer the last query any more than the question debated before the London Club—How far it was from the 1st of August to the foot of Westminster Bridge?

8. "On a farm of 250 acres, what is the most profitable husbandry? How must I commence? How many sheep and swine, &c., must I buy, and what are the best kinds? How many cows and what breeds? How many teams, and whether oxen or horses, must I keep? How many hands must I employ to do the labor, as I do not expect to work myself? How many acres of wheat must I sow annually? and what quantities and kinds of spring grain? and what varieties of grass for hay and pasture, and what number of acres of each will be necessary for the stock recommended? and lastly, what amount of profit may I reasonably expect annually, if I superintend it faithfully and judiciously?" Here's a smasher for you! "Yours most truly," with a witness; why didn't he say yours till death us do part." This is undoubtedly a twin brother of our Connecticut River friend.

9. Will henlock unshes given to sheep, cause the ewes to drop their lambs? Don't know. Where can subsoil ploughs be had and what is their price? At Worcester and Boston; price reasonable. Once more, could not one of your mechanical friends contrive a small wind-mill?

In respect to the last matter, we have no question of the talent of the Yankees, as we saw lately a picture of a renovating mill for grinding over old people, operating in the most interesting manner, an old decrepit woman just dropping into the hopper, all gone but her feet and her blue woollen stockings lately footed, and coming out at the bottom a charming lass of blooming seventeen.

10. Another friend, who signs himself Plato, the

old original no doubt, just coming round as he predicted, wishing to know whether he shall fence his wood lot or let it remain in common, or keep the cattle out, all expenses considered. Perhaps they would die if they got in, as Judge Thaine said to the farmer fencing in Kittery common. Whether he can make trees grow in his door-yard where the soil has been stripped off; whether he had better plant horse chestnut, mountain ash, spruce, fir and pine; but then he has his doubts; and then he wishes we should solve all these doubts through the Farmer, or by a private letter. Only twenty private letters a week for a regular manual exercise!

All these men, like good honest fellows, paid their postage, which is not a little remarkable, considering the state of the currency.

11. Then comes an inquiry why butter will not come? We shall answer this in another place.

12. Next a sober inquiry about a disease, a species of murrain among the cattle in Rhode Island, which we wish much that we could answer, but our experience is small and all our books and records are 300 miles off. We advise application to the best physicians in the neighborhood. We have no opinion of Cattle Quack Doctors, though they abound.

13. Have the leaves in hard-wood land been used as manure in your vicinity, and if so, with what success? Will say some other time.

Now this is not one half. We do not complain of it. We like it. It shows the wakefulness of the public mind, which is what we want in order to make progress; for what can we do with men who are asleep? Inquiry, inquiry is what we want. It cannot be too active; too direct; too persevering and pertinacious in regard to all matters of science and practice. From inquiry will grow up, of necessity, observation. Put inquiry and observation together, and then comes truth, that most precious of all gems; that only safe guide in life; that first of all elements in the power of doing good; that first of all movements in the highway to happiness.

Now there is not a question proposed to us as above, that is not worth asking, and there is not one we will not endeavor to answer, or get some other person to answer. Let our friends give us answers as may suit their convenience, and let there be as many more inquiries sent in as you please to put. But then, gentle friends, have mercy upon us. Do not, if you find us stopping for breath, thump us upon the back too hard; we shall come to presently, and if nothing else will do we'll ask some friend to put us in the Magnetic sleep, and we shall then answer at once.

The above queries, we infer, all come from the "Lords of the Creation." We have many more from the other and better side of the house; but they, we say it in a whisper, are *strictly confidential*. To the fair friend, who asked something about personal appearance the other day, we only say, "Handsome is as handsome does."

Other Queries.

Adolescents asks some questions, which as well we can, we shall answer. We wish he had been more definite. Does he inquire to what particular science he shall turn his attention and how shall he master it; or does he desire that we should prescribe a general course of reading? In either case, however, we do not know how we could do better than to direct him to the "School Library," published by Marsh, Capen & Lyon, Boston, which embraces both particular and general subjects, and is prepared with great ability by some of the ablest writers in the country. The volumes are sold separately at all the principal bookstores in the country; and no better service could be rendered to a community of young people than to form a reading club for the purchase of all of them. Besides

these, Harpers' Library abounds with useful works, at a very low price, though they have conducted with so much trenchery in regard to some works, take for example the Life of Jay, that their books on controverted subjects are to be received with caution. In other respects, they furnish an immense amount of reading on various subjects, at a very low rate.

Female Correspondence.

We publish here a charming letter from Zelia, a kind lady, who responds to the invitation in our last. We assent to everything she says, and wish we could say it half as well. If she would only have subscribed herself Rosa, or Lilia, or Japonica, or Daphne odorata, how much more appropriate! But we welcome her to our columns under any name she may choose, thinking he must be a lucky fellow who can alter her name at his pleasure. She will find a kindred spirit in W. B. in this paper. What effect her letter will have upon this poor fellow when he comes to read it, we cannot say. He is quite plaintive she will perceive, the natural effect of his condition. We cannot quite agree with him that woman is never so lovely as when "administering to the drooping wants of the lily, or watching the expending beauties of the rose." Though fairest among all flowers, yet we think them much more lovely when "tying the old man's slipper;" or watching the expansion of far fairer flowers than those, which bloom only to perish on earth. But we are growing too sentimental. It won't do, Zelia! we must leave that to you. We had once some fire, but it is only ashes now.

M. C. COLMAN—

In the last number of your paper you say that you will be glad to hear from your female friends, on the subjects of gardening, floriculture, and other domestic matters. I am exceedingly glad that you have so promptly suggested it; matter, and I hope it will not be in vain. I hope that your generous and praiseworthy efforts to render your columns instructive and interesting to your female readers, will be by them fully appreciated, and that they, on their part, will not withhold that co-operation, which their duty as well as their interest should prompt them to bestow. The object of such journals as yours, being to promote improvement in domestic as well as rural affairs, cannot be fully attained without female aid—aid of those whose chief duties consist in domestic management.

Your extensive and intimate knowledge of the condition of our rural population, renders it unnecessary to tell you of the faultiness of female education in the country. You are aware that those of us, who have been well instructed at home, in household affairs, have not received a liberal, or seldom, an ordinary school education; and on the contrary, when much care has been taken to give us a *polite* education, that the home branches have been neglected, forgotten, and eventually despised; this remark, you know, sir, will admit of general application, though there are, of course, numerous exceptions.

Home and school instructions are by no means properly blended, and until they are, we need not expect to find a great number of female essayists on rural or domestic economy. The increased attention, however, which is now given to the improvement of agricultural science, and particularly the laudable effort which is in progress to awaken a spirit of home industry—multiply its sources—and afford it suitable encouragement, will tend in a great degree to remove this evil, as well as many others, that have crept into our domestic habits during a period of superficial wealth, and deceitful, and intoxicating prosperity.

When I took up my pen, I meant to confine myself to a few remarks on ornamental gardening and floriculture by female, the preceding remarks will, therefore, have to go for a preface.

* See N. G. Farmer, vol. 1, p. 145, and vol. 2, p. 111.

There is scarcely anything which legitimately belongs to female industry, so much neglected as that which is of all others the most agreeable, the most conducive to health and happiness, viz. the cultivation of shrubs, plants and flowers; those external ornaments of home, that throw around it such an air of comfort and contentment, that cheer, enliven, and beautify country life, that multiply and strengthen the attachment of families to their home, and that cause it to be associated in the memory, when perhaps far, far distant from it, with the most endearing recollections. If the attention of females can be generally enlisted in this cause, if they can be persuaded to venture out into the pure air, and, with their own hands, aid in the cultivation of the "loveliest of nature's gems," then we may expect a change to come over the appearance of our country homes, and such a change as cannot but give universal delight. Instead of seeing them as they now are, for the most part without a shrub, a flower, or ought that indicates an appreciation of nature's beauties, we would find a shrubbery and a flower garden a certain accompaniment of the dwelling.

Why should we devote such assiduous attention to our furniture, its brilliancy and beauty, and with an unwearied care keep all the internal ornaments of our houses in order, neatness and taste, while at the same time we never think of displaying our taste in outdoor ornaments? Is it right? is it consistent? I am sure the reader will answer no! and certainly I do. Nothing is more provoking than to hear a woman ask "what is the use of plants or flowers?" Has the Almighty created us without any other than animal feelings and appetites? What a grossness of intellect it must be that can prompt such a question! yet that same person is an ardent admirer of silk ribbons, and other similar gewgaws, and would not hesitate in sacrificing whole days and weeks of valuable time, and spending much hard earned money on fashion and frivolity!

The advantage which our health would derive from the delightful labors of the garden, is another strong argument in favor of it: three fourths of us are complaining of ill health, one of the greatest of human ills; and no one will deny but that it is caused by the delicate manner in which we are brought up. We want more exercise,—we want physical as well as mental exercise in the free open air; our health and true rational enjoyments have been sacrificed to unworthy motives. Strange illusion! That in the pursuit of mere phantoms, we should so shamefully neglect the means which a beneficent creator has kindly given us, for the gratification of the purest desires of our nature!

How is it possible that so many should seem insensible to the pleasures of the garden? What more exquisite than to leave the confined atmosphere of a dwelling, and inhale plentifully the balmy breath of morning, sweetened with the perfume of flowers, perform the necessary labor, and return to the domestic duties with a glowing cheek and a healthful appetite? How sweet to pluck the opening rose bud, or gather a nosegay which, with our own hands, we have planted and cherished! "As long as I live, flowers shall multiply in my garden, and be cherished in my bosom; and when I die, if any kind hand will place them there, flowers shall smile upon my grave." I fear I have extended my remarks too far already. I intended to allude to other matters, but will postpone them till next month, when you will hear from me again, if these humble remarks are worthy a corner of your paper. I do not write with a view of affording instruction to others, but to elicit the views of those who are competent to instruct, that I may myself learn. Were it in my power to do, say, or write anything that would promote the general good, most

happy would I be indeed. Wishing you a hearty welcome to our region, and hoping that your labors will be rewarded with the fullest success,

I am &c.
 Chelsea Hill, Feb. 15th, 1842.

ZELIA.

Cranberries.

We extract the following article from the *Maine Cultivator*, as highly deserving the attention of farmers. We have had no practical experience of this cultivation, but have known cases in which several acres of swamp or low meadow have been sown with them, which have afterwards yielded a large product. We know one instance upon the best authority, in which a farmer sold of them from his own farm to the amount of more than one thousand dollars. That they are capable of being grown with advantage upon high and sandy land, is to us a new fact; but, from the confidence with which it is stated, it certainly deserves attention. The fruit itself is healthy and, properly prepared, delicious; and large amounts are wanted as well for exportation as home use.

The cultivation of the cranberry (*Oxycoccus macrocarpus*) has not, we believe, received much attention in this region.

Most of those usually exhibited in our markets, are gathered by the country people from the bogs and swamps where they grow wild, and without any assistance whatever from the hand of man.

Like all our native fruits, however, the cranberry is susceptible of being greatly improved by cultivation. In Massachusetts many farmers cultivate from one to a dozen acres, and as the fruit brings readily a dollar per bushel in the Boston market, they find them the most lucrative crop they can raise. It is stated in the *New England Farmer*, Vol. ix, No. 18, that Mr. F. A. Haylen, of Lincoln, in that state, raised, in 1830, four hundred bushels, for which he received four hundred dollars in cash. This is profitable farming.

Kenrick, asserts Sir Joseph Banks, who had taken pains to obtain the *oxycoccus macrocarpus* from America, harvested in 1831, from a square of eighteen feet each way, three and a half Winchester bushels, being at the rate of four hundred and sixty bushels to the acre.

The soil most suitable to the culture of this plant, is a low, moist and swampy muck, but large crops have been taken from lands in every respect precisely the reverse of that in which they flourish in their natural state. Even light sandy loam, and in which there is a predominance of vitreous or siliceous matter, if manured with compost composed of clay, muck, and swamp mud, and kept uniformly and moderately humid, will produce excellent cranberries. It is even asserted by those who have had ample experience in the business of cranberry culture, that the vines, under this treatment, will not only be much more thrifty and prolific, but that the fruit will also be much larger, fairer, and of better flavor than that gathered from vines in their natural state. On most farms, however, there are numerous low places which might be advantageously devoted to this plant, and wherever such places are to be found on a farm, they should unquestionably be selected in preference to artificial or compounded soils. The method of planting, in such locations, is to dig holes in the turf, from one to two, or two and a half feet deep, and two feet over. Into these holes are placed the sods or compact turfs containing the roots which are then carefully covered with the soil and a sprinkling of beach-sand thrown over the hill. The hills should be four feet apart each way, which gives ample scope for the vines to trail or branch over. Plants cultivated in this manner, come rapidly into bearing, after which nothing more is requisite for several years, than merely to give them a slight dressing, occasionally, and to supply new plants where the old ones have decayed, or died out.

A plantation, managed in this way, is a most valuable appendage to any farm; and in this section of the country, where the fruit brings one dollar and fifty cents, and often two dollars per bushel, it would be peculiarly so. The labor of harvesting the cranberry is very simple, and very expeditiously performed by means of a rake, constructed exclusively for the purpose, and with which, in favorable seasons, a skilful hand will gather, with ease from fifty to a hundred bushels a day. W.

Titles.—A Rule.

We particularly request that all our correspondents would attach their names, places of abode, and data, to their communications. If they desire their names concealed it shall be so done.

We must ask indulgence if we withhold in all cases all titles, such as Excellency, Honorable, Reverend, or even Esquire, which in truth is now generic instead of specific; and we should be puzzled to say whom it does not designate, unless it be a woman. As things go, however, it may not belong withheld from them. Jerusalem Salmagundi, Esq., for example—how finely that appears—certainly the women cannot long resist the temptation.

In all our official reports for the last four years, we have made an absolute rule to give no title; and it has saved us much trouble. If, however, any of our correspondents desire their titles to be annexed or prefixed to their names, we promise to give all they will honestly send, whether it be F. R. S., which a fellow in England lately assumed, because he said he was Famous for eating Rich Soup, or A. S. S. which may mean Socius Societatis Agriculturæ, shall be duly displayed. In the last case however, we cannot promise that every one who does not understand Latin shall hit upon the right interpretation; any more than in the case of the Tobaccoist, who on setting up his coach and six, desired his carriage-maker to place a coat-of-arms and a motto on the door, which should reprove any who presumed to ridicule his elevation. The coach-maker accordingly put on the door the two Latin words, *Quid rides*; or why do you laugh? but which, unfortunately, by the illiterate, was read without regard to prosody, and as if it were plain English, *Quid rides*.

Gypsum.

Josiah Borwell, of South Hadley, Mass. has 1 acre of pasture ground, and applies to it annually one thousand pounds of gypsum. The same application and at the same rate, has been made 35 years in succession. On this lot he pastures annually one large yoke of oxen, one horse, two cows and some years three cows. Prior to the use of plaster, Mr. B. says it required at least six acres of this land to afford as much feed as he has obtained from one acre, by using plaster.

He has also a piece of mowing ground which contains four acres. Two crops of hay are taken from it regularly. On this ground he uses plaster of Paris freely, and applies a top dressing of manure. His annual product of hay is fully sixteen tons. P. L.

A Protector for the Defenceless.

The subjoined statement is new to us. It is made on good authority in the *Maine Cultivator*, and we hope may be well founded.

Many object to rearing hens on account of their liability to be carried off and destroyed by hawks and owls. In some situations this is a serious objection, as the hen, if suffered to run at large with her chicks, is almost certain to be lost.

But the evil may be avoided. A Guinea hen, if suffered to associate with the flock, will at all times prove efficient in protecting the latter from the hawk, who no sooner hears her voice than he takes wings and carries the war into some other quarter, where his murderous propensities for slaughter may be more easily gratified, and without the fear inspired by so valiant and powerful a foe.

The eggs of these fowls are also highly prized by some, and meet with a ready sale in our markets, being much larger than those of the common hen. W.

A meeting of the friends of Home Industry was held in Rochester on the 16th ult. The subject of governmental encouragement and protection to domestic labor, was discussed in their bearings upon labor in all its forms, agricultural as well as manufacturing, and likewise upon the commercial interests of the country. We may on some future occasion have opportunity to treat this subject more at large.

Seneca County Agricultural Society.

Through the politeness of the President of this Society, we have received a copy of its constitution and by-laws, and of the address delivered at their annual Fair on the 21st Oct. last. It forms a closely printed pamphlet of 20 pages.

The address is preceded by an interesting sketch of the history of the county, the whole of which we should be glad to transfer to our columns, if our limits admitted of it. It is from the president of the Society, G. V. SACKET, of Seneca Falls.

The country now constituting Seneca county, and in old Western New York, was in possession of the Indians until 1779, when Gen. Sullivan and Gen. Clinton entered it with a strong military force to repulse the Indians then in alliance with the British troops, and whose incursions upon the settlements of the whites had become exceedingly disastrous and troublesome. The enemy were routed and the combined forces having travelled 300 miles in a circuitous route in the wilderness, came at length upon the Lake shore. Mr. Sacket says that, until this time, none but the captives taken from our border settlements, or perchance some struggling French Jesuits, had ever set foot on our soil. Yet when the army reached the lovely Lake country, as they approached the margin of the Lake "they found in many places instead of a howling wilderness, orchards, farms, and gardens resembling civilized life." These were improvements made by the Indians. Seneca, he denominates the mother county of Western New York. In 1784 a treaty was concluded between the United States and the Six Indian Nations, and the lands east of Seneca Lake were ceded to the United States.

The change in the value of lands since that time in this part of the country, is most remarkable. Lands in this and the neighboring counties were then estimated not by the acre but by the lot, (the number of acres in a lot is not stated) and lots which then sold for \$25 per lot, are now worth \$25,000, being an increase of a thousand fold in about 50 years. Who would not have pronounced the prediction of such an advance a mere dream out of the Arabian Tales?

Mr. Sacket then speaks in an interesting manner of the first settlers, some of whom were present on this occasion; one of whom Andrew Dunlap, was the first man who put a plough into the ground between the Lakes, and now in his 83d year, acted as chairman of the committee on ploughs and ploughing on this occasion. The President pleasantly remarks, that although he is in favor of rotation of office as a general principle, yet this appointment he hopes will be continued to this patriarch as long as he can meet with them; and then he hopes to see it descend to the heir, who should occupy the old homestead. A brother of Andrew, William Dunlap, likewise a pioneer at the same time, was on the same committee.

There was no mill in the county so late as the year 1794, nor in what is now called Western New York until the end of the year 1790. Until that time the inhabitants were under the necessity of going to Rome, on the Mohawk river, or down the Susquehanna to get their flour and meal. A family of religionists under the direction of their founder, Jemima Wilkinson, came here in 1789, and built and put in operation the first mill in Western New York in the latter part of 1790. Since that time the increase of mills has kept pace with the increase of the inhabitants and the growth of wheat; and now in the villages of Seneca Falls and Waterloo there are 13 mills: most of them of

the largest class, turning 35 run of stone, and capable of flouring 10,000 bushels of wheat daily.

The county of Seneca is 33 miles long and 10 broad, containing 330 square miles. When settled at \$25 per lot, it would have been valued at \$8250. In 1840 it was estimated that 5-6th of the land had been brought into cultivation, and estimated at \$44 per acre exclusive of villages, it would now be valued at \$8,250,000. In 1789 it may have had 75 inhabitants. It now contains 24,000, equal to 75 souls to the square mile. The annual products of the county were as follows:

Wheat,	350,804 bushels at \$1.00	\$350,804
Corn,	178,671 " "	89,337
Rye,	5,520 " "	3,125
Oats,	213,826 " "	53,155
Barley,	15,819 " "	7,909
Buckwheat,	19,798 " "	9,899
Potatoes,	263,293 " "	50,848
Hay,	33,163 tons at 7.00	267,141
Beef & Pork,	20,010 lbs. at 10	206,100
Wool,	166,351 lbs. at 50	83,277
		\$1,122,105

These facts are remarkable and highly deserving of being recorded.

These historical sketches are followed by an address from A. B. Dunlap, the Recording Secretary. The subject is the "Nobility of Agriculture and the means by which it may be elevated."

The agricultural profession is to be elevated by the Archimedean lever of education, scientific and practical education. The agricultural profession is among the most important in the community. It should be among the most esteemed. The current of public opinion is now setting strongly in its favor. It has been made honorable by the application to its practical improvement of some of the brightest minds, and of men of the highest political elevation and influence.

Immense service has been rendered to the cause by various publications, especially of a periodical character. These have diffused widely a vast amount of information. Agricultural Societies have contributed most essentially to the science and the practice of an improved Husbandry. The means of advancing its progress, however, upon which he dwells with most emphasis, is the establishment of Agricultural Schools. It seems extraordinary that while the teaching of almost every other science and art is effectually and liberally provided for, this, in various respects, among the most important, should have been to so great a degree neglected. These are the main sentiments of this useful and sensible address; and we subjoin an extract.

"Wealth, influence, and talents have long been ennobled in building up the agriculture of Britain; and she will continue to take the lead of us—say and do what we please—unless science is made the basis of our agriculture. Her legislators are not unwilling like our republican statesmen to grant legislative aid to protect in every desirable way her agricultural interests. We are not launching upon the dangerous sea of experiment—we have well established landmarks to guide us in our course. Agricultural schools have been established in Ireland, in France and Germany, in despotic Prussia and Russia. The despotic reformer of down-trodden Egypt has established a school for the application of science to agriculture. But here, in this boasted land of liberty, a government emphatically resting upon the shoulders of the farmer, there is not a solitary school to foster and protect this great, this all absorbing interest—on interest upon which is based our national greatness, and upon which depends the peace and perpetuity of our free institutions. We require the physician to have a knowledge of his profession, before we entrust to him our lives and limbs. The lawyer

must understand the laws, before we allow him to take charge of our property; and the divine who has not stored his mind with the truths of both natural and revealed religion, is a blind leader of the blind. What then shall we think of the doctrine that the farmer has no need of preparation in order to fit him for his elevated calling? We have our law schools, our medical schools, and our theological schools; and now we ask the important—the weighty question—why shall we not have our agricultural schools?

We now close the subject, trusting that an intelligent and enterprising community will answer the question, as their important interests, individual, social, and political, require—as the spirit of the age and the honor and independence of the nation demand. We have glanced at a few of the means by which the character and standing of the American farmer can be elevated, and his profession raised to that point where nothing shall be above it but "God and the Laws"—means which will bring back the golden age of husbandry, when

"The sacred plough employed
The kings and awful fathers of mankind;
And some with whom compared your insect tribes
Are but the beings of a summer's day,
Have held the scale of empire, ruld the storm
Of mighty war; then with unwearied hand
Disdaining little delicacies seiz'd
The plough and greatly independent liv'd."

The address is followed with a list of premiums and the names of the successful competitors. Few things will more contribute to the success and popularity of the Society, than the publication annually of its transactions, annexing the address, the reports of committees, the names of the winners of the prizes, their accounts of their cultivation and management in all their details, a list of members, a list of officers, a list of premiums, and generally some valuable agricultural communication or information which may interest the farmers. This being sent to every member, will put him in mind of paying his subscription, will lead him to induce his neighbors to become members, and will create an interest in the Society most conducive to its increase, its successful management, and its beneficial fruits.

The following are the Officers for the ensuing year:

President,

G. V. SACKET, Esq., Seneca Falls.

Vice Presidents,

NATHAN W. FOLWELL, Lodi,

TRUMAN BOARMAN, Covert,

WM. R. SCHUYLER, Ovid,

JOHN D. COE, Romulus,

JOHN V. MANNING, Varick,

JOHN JOHNSTON, Fayette,

JOEL W. BACON, Waterloo.

MATTHEW W. WEST, Junius,

JASON SMITH, Tyte,

JACOB KISHLER, Seneca Falls.

ABRAHAM B. DUNLAP, Ovid, Rec. Secretary.

SAMUEL WILLIAMS, Waterloo, Cor. Sec'y.

JAMES STEVENSON, JR., Waterloo, Treasurer.

Sleeper's Address.

An ADDRESS delivered before the Agricultural Society of Westborough and vicinity, Mass., Oct. 1841.

By JOHN S. SLEEPER, ESQ.

This address abounds with sensible remarks and useful suggestions, and advice to the agricultural classes, given in a perspicuous style, which is not a common characteristic, and in a lively and playful manner as to attract attention; which is as it should be.

The Society before which this address was delivered, consists of farmers of Westborough, one among the best farming towns in Massachusetts, and some of the neighboring towns, who meet occasionally and frequently for mutual inquiry and discussion in relation to the great art by which they subsist; for the intercommunication of their own actual experiences; and the im-

erting of such information as any may have acquired, they hold likewise in the town, an annual cattle show, in which they display their best stock, and exhibit some of their products, which are examined and reported on by committees appointed for that purpose. This is a specimen of many societies, founded on the same plan, in different parts of the state. They are eminently beneficial; they stimulate inquiry; they arouse a whole-menculation; they lead to experiments; and are instrumental in diffusing a good deal of practical information.

We should be glad to give this address entire, but our limits forbid it; and we must confine ourselves to some brief quotations.

"Out of thirteen millions of the population of Great Britain, engaged in various pursuits, nine millions are employed in agriculture. And the soil of Great Britain is by no means naturally fertile, but requires the continued application of art and labor to keep it in a highly productive state. Yes, in Great Britain, land represents more than seven times the value of manufacturing capital, four fifths of which capital is employed in furnishing the requisite supplies to agriculturists. And the average net profit arising from the immense landed capital is estimated at seven per cent. and a half per cent. It is therefore generally limited in Great Britain, that agriculture is the basis of British prosperity, and the chief pillar of the government; and the broader and firmer the foundation, the more profitable and durable will be its concomitant lies, manufactures and commerce.

This fact is well illustrated by an allegorical sign in a country inn, called the "Five Ails." It represents five human figures, beneath each of which is a motto. The first figure is a king with his regalia; his motto, "I govern all." The second, a bishop in his pontificals; his motto, "I pray for all." The third, a soldier with his gown; his motto, "I plead for all." The fourth, a soldier in his regiments; his motto, "I fight for all." And the fifth, a farmer, in appropriate costume, with his scythe and rake; motto, "I pay for all."

In the United States, the actual produce of our soil, unless in seasons of great scarcity, after supplying the demand for home consumption, furnishes three fourths of our exports to foreign countries. And our agricultural riches thus give an impulse to commerce and manufactures, and enable us to import comforts and luxuries from abroad, by which a revenue is derived for the support of the government. According to the Report of the former Secretary of the Treasury, giving the value and quantity of the agricultural productions in the year 1839, it appears that in that year the article of greatest value produced was *hay*. The number of tons computed to have been raised, being 9,830,415, which at 80 cts. a hundred weight, the average price in the New York market, amounted to the enormous sum of \$157,286,840! The article next in value was *Indian corn*, viz., 98,161,445 bushels, which, at fifty cents a bushel, amounted to \$154,080,223. After it comes *cotton*, about one billion three millions of pounds, which at even cents, gives \$114,006,577. Then we have *potatoes*, amounting to 73,983,449 bushels, at one dollar a bushel; *potatoes*, one hundred and two millions of bushels; which at 42 cts., gives 42,682,000 dollars. *Products of the dairy*, equal to 31,159,000 dollars. *Oats*, at 33 cts. a bushel, amounting to 33 millions of dollars; then *sugar*, 19 millions of dollars, and tobacco at 10 cts. a pound, amounting to \$14,300,000.

In these returns the product of North Carolina, Kentucky Florida and Wisconsin, are not included; and it is believed that the production, as published, is fully ten per cent. below the actual product. Enough however is known to satisfy the world that we possess immense wealth. For the annual value of agricultural productions alone, as officially given in this Report, is nearly seven hundred millions of dollars! This was the product in 1839; that of 1840 was certainly ten per cent. greater; and there is good reason to believe that the product of 1841 is larger still.

On reflecting on these facts, every patriot must wish that agriculture may experience the fostering care of government; that our legislatures may do more for the farmer, instead of undoing what has already been done; that agricultural societies may multiply in our land; and where facts may be gathered and knowledge diffused; that well-conducted agricultural publications may be well sustained by the agricultural community, and circulate extensively on every side; that agriculture may be made a branch of study in our

schools; and that a professorship may be established in our colleges."

"In concluding this address, I would say to all farmers, cherish your occupation, and maintain its respectability on all occasions, and at all hazards. Be faithful to yourselves, and you will find no one to dispute with you the antiquity, the utility, or the elevated character of your occupation. Be industrious; for industry is the landmark of health, and the key to unlock golden treasures. However great the beneficence of nature, she gives nothing gratuitously to man.

Study and practice economy, for it should ever be remembered, that although labor creates wealth, economy accumulates it. By economy I do not mean a sordid, grasping, avaricious spirit; for true economy is as far removed from that on the one hand, as from heedless extravagance on the other. Study the comfort and happiness of your family, but avoid luxury as an evil of magnitude. Remember that the introduction of luxury into kingdoms, states, or empires, has precipitated them from the summit of power, and from the most flourishing pitch of glory and renown.

Be temperate in your habits. On this much depends. The pure water which gushes from the hill-side, and meanders through the fields and meadows, is the drink which the bounteous Giver of all good designed for man. Intemperance is a rock on which many a gallant bark has been wrecked. Industry and economy cannot be practiced except in connection with temperance, as the helpless fate of many otherwise able and worthy husbandmen have proved. It should ever be borne in mind, that in this country, industry, frugality, and temperance will always conduct a man triumphantly through the paths of life.

Cultivate your minds. This may be done by reading, by study, or by conversation. A good farmer, who manages his concerns as they should be managed, will always find time to cultivate his intellectual faculties, as well as to exercise his physical powers; otherwise, he were indeed to be pitied. There are times when the mind should be exercised as well as the body; when information on various subjects of general interest should be obtained, of a character more solid and enduring than can be found in the newspapers of the day. Books and periodicals may be had in these "go ahead" times, on almost every subject, in forms exceedingly cheap, and well-selected social libraries should be established in every town or village in New England.

See that your children are well educated. Let your sons be instructed in the various branches of useful learning, that they may become active and worthy members of an enlightened community. Indulge on their minds elevated sentiments and liberal principles. Teach them that they should not live for themselves only; that in this republic, every man is a pillar of the state, and exerts an influence in society, and has indispensable duties to perform, to his family, his country, and his God.

Let not the education of your daughters be neglected, for on the character of our women depends the future fate of our country. Teach them early to look upon the labors and the profession of a husbandman, with smiles and sympathy, for we all well know, that in civilized communities, where the influence of the gentleman is all powerful, as it should be, no enterprise can succeed, or become popular, without being cheered by the smiles and sympathy of woman, the "flower of the human species." Educate your daughters so that they will make good farmers' wives, and, if thus educated, they will reflect honor on any station, however exalted, and be worthy to become the mothers of freemen."

Floriculture.

Bring blossoms of every hue and name,

And buds for opening youth,

Garlands for honor and wreaths for fame,

And fadeless flowers for the purest flame

Of the heart's enduring truth.

Flowers for the mourner, flowers for the bride,

Or garnish the hall of death,

And to strew the biers of them who died

In youth and age and manhood's pride,

For such and for all a wreath. Locke.

In all ages and in every clime, the love of flowers has been cherished and cultivated with increasing attention and admiration. They have received the fondest titles that sympathy or affection could offer, and in their opening petals and fading beau-

ties, they invite to the most pleasing reminiscences and reflecting reflections that are associated with life. In the one, we behold the morning of our own existence beautifully exhibited with freshness and dews of youth upon us; while the other, invites the reflection that "all flesh is grass, like the grass it withereth, and like the flower it fades and its goodness passes away." Thus every age finds in them some emblem of its own fleeting being, and every circumstance of life may hail them as counterparts.

In ancient times they were employed to deck the feast, and strew upon the bier and grave where affection called the admiring crowd for convivial festival, and weeping sorrow laid its loved one to repose. They were spread in paths of triumphant warriors as the emblems of victory and honor; and in gay wreaths adorned the brow beneath which gay and happy hearts beat in holy response at love's pure rituals.

They bloom alike in the limited territory of the cottager, and in the proud and extended parterres of the wealthy and the gay.

A love of flowers has ever been regarded as an index of moral excellence and intellectual refinement. Who that beholds their unostentatious elegance, their gay simplicity, and unassuming beauty ever turn away from them without being impressed with the emptiness of artificial pomp and splendor? Who that witnesses their evanescence, will not read effectually the lesson of universal frailty and decay? For childhood and youth the cultivation of flowers presents an imposing employment and an interesting and instructing amusement. In the period of existence, when care does not present its corroding anxieties; when the spirits are free and buoyant, and the world smiles fresh and gaily on every hand, when expectation is buoyant in looking through life's vista as upon a bed of flowers; when home and dear associations are binding the soul in a thousand ties as indissoluble as existence; when every scene and every object is impressing the mind with images which are to dwell like bright spots upon the memory, when manhood comes with its sober reign and age with its furrowed brow and silvery hairs,—in the morning of being when every action does its full share towards laying the foundation of thought, feeling and principle for life, what employment for leisure hours can be more appropriate, than aiding the floral world in its grand designs of beautifying the earth, and what teachings of wisdom can be more powerfully inculcated than those taught by the simplicity and purity of nature?

To the female sex, in every period of life, it offers considerations of great and abiding import. From them they may derive rich lessons to aid them in rearing the temple of the mind in those who are to succeed them, a sphere peculiarly their own, and to close with a response to the interrogatory of another, there is no object in nature more beautiful than a young and lovely woman seen in a parterre of flowers, herself the fairest, adorned with innocence and virtue, administering to the drooping wants of the lily, or watching the expanding beauties of the rose.

W. B.

February, 1842.

Cleaning Glass.

The French mode of cleaning fine glass utensils, &c., gives them great brilliancy. It is done by finely powdered indigo, and dipping into it a moistened linen rag, with which the glass must be smeared, and wiped off with a perfectly dry cloth.

As a substitute for this, fine sifted ashes, applied by a rag dipped in spirits, will also answer very well; but Spanish white is apt to roughen and injure the glass.

Improved Stock.

We invite the particular attention of those interested, to the sale of Mr. Weddle's Improved Stock, advertised in this number. It presents an opportunity of obtaining some of the best animals of the kind for breeding, to be found in this country.

Agents for the New Genesee Farmer.

In addition to the numerous Postmasters and other friends of Agriculture who have kindly aided the circulation of this paper, the following persons will receive Subscriptions in their different towns and cities.

Newburyport, Mass. J. Colman.
Worcester " Clarendon Harris,
Lowell, " D. Bixby,
Salem, " John M. Ives; Francis Putnam,
Greenfield, " James Deane,
Lynn, " Charles Coudage,
Danvers, " S. Proctor,
Portsmouth, N. H. Nathl March,
Providence, R. I. Hiram Fuller,
Hartford, Ct. E. W. Bull,
New York, " Theo. Foster,
" " King & Co., 199 Broadway.
Albany, Wm. Thorburn,
Utica, J. E. Warner,
Syracuse, T. B. Fitch, & Co.
Auburn, T. M. Hunt,
Buffalo, W. & G. Bryant,
Toronto, Canada, Lyman Farr & Co.
Hamilton, " Samuel Kerr,
Brantford, " John Curtis,
Kingston, " J. W. Brent; John Creighton.

CLOVER AND TIMOTHY SEED.

OF the best quality, free from four seeds. For sale at the Seed Store. M. B. BATHAM.

LARD LAMPS.

THE subscribers have just received a large lot of the above mentioned Lamps, and will invite the attention of farmers, mechanics, and others who wish an article from which the cheapest light may be obtained from the use of Lard. They burn well, and in a great measure are doing away the use of candles, and are not supposed to be dangerous, and are worth the trade of every domestic economy. To be had at No. 3, Exchange-st., at wholesale or retail.

BREWER WATTS, & Co.

Rochester, March 1st, 1842.

FARMS.

FOR SALE, on a long lease, a farm of 50 acres—10 acres improved—with a good house and barn upon it, in the town of Ridgeway, Orleans Co. Also a farm of 110 acres—70 acres improved—with two houses and a barn upon it, in North Clarence, Erie county. Apply to Wm. R. Montgomery, at his office, or to H. MONTGOMERY, No. 4, Spring-st.

Fruit and Ornamental Trees, Shrubs, Green House Plants, &c. &c.

THE subscribers are prepared to execute all orders for Fruit and Ornamental Trees, Flowering Shrubs, Green House Plants, Bulbous Flower Roots, Double Dahlias, and all other articles in the Nursery line, on the most moderate terms. Persons who are about establishing new Nurseries, or wish to act as agents for the sale of any of the above articles, will be very liberally dealt with, and are requested to communicate their intentions to us immediately. Where several persons in the same neighborhood, are desirous of procuring trees, they will do well to unite their orders, and let the subscribers be forwarded in direct proportion. All orders must be accompanied with cash or a satisfactory reference in Rochester or vicinity. Price Catalogues will be sent gratis to applicants. For want of space, we cannot give a full list of the articles we have on hand. Address (Post Box) LEVANGER & BARRY, Mt. Hope Botanic Garden and Nursery, Rochester, N. Y.

Valuable Works on Horticulture and Agriculture.

Just received by Rail Road, from Otis Brothers & Co., Publishers, Boston.

THE NEW AMERICAN ORCHARDIST; or an account of the most valuable varieties of FRUIT, of all climates, adapted to cultivation in the United States; with their history, modes of culture, management, uses, &c. With an appendix on vegetable, ornamental trees, shrubs and flowers, the agricultural resources of America, and on Silk, &c. By Wm. Kenrick. Third edition, enlarged. THE NEW AMERICAN GARDENER; containing practical directions on the culture of fruits and vegetables, including Landscape and Ornamental Gardening, Grapes, Vines, Strawberries, &c. &c. By Thomas J. Fessenden, editor of the New England Farmer, and author of various other works. THE COMPLETE FARMER, and Rural Economist; containing a compendious epitome of the most important branches of Agriculture and Rural Economy, by Thomas G. Fessenden. Fifth edition, revised, improved and enlarged. The above three books uniformly bound, in beautiful style—per \$1, each—are for sale at the Rochester Seed Store and its Agents. M. B. BATHAM. March 1st.

GENESEE NURSERY.

THE subscriber has constantly for sale at his Nursery on Main street, one mile East of the Bridge in Rochester, a choice selection of Apple Trees of large size, warranted of the kinds represented, embracing about 40 of the best varieties of fruit, such as the Winter use, price \$3.50 per tree; a liberal discount to those who may purchase in large quantities for retailing; or from a distance containing remittances for good early references will receive prompt attention, and the trees will be shipped or delivered as directed. Also a few Peach and Locust Trees for sale.

ELECTUS BOARDMAN.

The above Establishment has been carried on in this town over 20 years.

New Arrival from England.

JUST received from London, viz. Boston, a large assortment of seeds of the growth of 1841, embracing a full supply of all kinds of Cabbage, Cauliflower, Broccoli, Irish, Turnip, Ground, Purple top, Purple top, Purple top, Mangold Wurtzel, white Dutch Clover, a choice lot of Flower seeds, and a multitude of other things—See CATALOGUES.

M. B. BATHAM.

Hatch's Sawing Machine, in Ohio.

Answer to several inquiries on the subject, Mr. Hatch announces that he is willing to dispose of the right of his machine for the whole state of Ohio, on very reasonable terms. He has one of the machines, which he has at the farm of J. W. Smith, Esq., at Maumee City; and one will be sent to Cleveland, on the opening of navigation.

LEBIEG'S AGRICULTURAL CHEMISTRY—For sale at the Seed Store, price \$1.50.

A Nurseryman Wanted, in Ohio. The proprietor of a well established and favorably situated Nursery Garden at Columbus, Ohio, wishes to engage a man of some experience in the business, to take the management of the establishment, either as a partner, or for salary. Address, if by letter post-paid.

J. A. LAZELL.

Columbus, Ohio, Feb. 1, 1842.

GREAT SALE OF BLOODED STOCK. I propose to sell by Public Auction, on Tuesday 29th March, at my farm in Greece, adjoining the Erie Canal, six miles west of Rochester, all my blooded and grade stock, including my choice of Cattle, Horses, Sheep, and Swine. Sheep and Hogs, the particulars of which, with pedigrees of the same, will be given at a future day.

Rochester, Jan. 25, 1842. THO'S WEDDLE.

FRUIT TREES.

THE subscriber has just prepared to furnish in large or small quantities, the finest varieties of Fruit Trees. Flowering Shrubs, Herbaceous plants, Bulbous Flower roots, Double Dahlias, Green house plants, &c. Also, GARDEN SEEDS, raised by the proprietor at the Rochester Seed Garden, and put up in boxes or packages to order, all of which are warranted genuine as represented, and of superior quality.

Orders for the Spring, will be promptly attended to on very liberal terms, when accompanied with cash or satisfactory references.

Selections will be made by the proprietor, when requested.

C. F. CLOSSMAN.

Rochester, Feb. 1st, 1842.

NEW CUSTOM MILL.—The subscriber having taken the White Mill on Water Street, East side of the river for the purpose of running it as a custom mill, he gives notice that he is now prepared to do work in as short a time and as well as any Mill in Western New York, and with his facilities and a close application to business, he is in hopes of procuring and obtaining a share of public patronage.

WANTED immediately, 5000 bushels Wheat; also Barley, Beans, Oats, Peas, Grass Seed, Flax, Flax Seed, Bristles, Bees Wax and dried Fruit for which the highest market price will be paid.

N. B. Flour will be at all times manufactured on the most reasonable terms for merchants or others who wish grain for seed.

Rochester, January 1, 1841. 3m W. C. FOSTER.

Rochester Seed Store and Agricultural Repository.

THE proprietor of this establishment, would now inform his friends, that he has just received the charge of the New Genesee Farmer, [to alter hands,] he will hereafter devote his whole attention to the business of the Store, and to the sale of the various articles in the establishment to his customers. A full supply of nearly all kinds of SEEDS are now on hand for the coming season; part of them raised in this vicinity the past season, by C. F. CLOSSMAN and his brother, and the rest obtained from the most respectable foreign sources. Knowing that success in this business must depend on merit, great pains will be taken to have all seeds just what they should be of the right kind and the best quality.

OF AGRICULTURAL IMPLEMENTS, GARDEN TOOLS, BOOKS, &c. There is a good supply on hand, but many more will be obtained in the spring, and in the autumn, to enlarge the establishment so as to allow more room for this class of articles.

Merchants will be supplied with seeds for retailing, at very low prices. The usual number of Agents will receive assortments on commission as heretofore, during the winter.

See CATALOGUES gratis.

Rochester, Feb. 1st, 1842.

M. B. BATHAM.

A FINE FARM FOR SALE.—Of fifty acres of land, situated only about a half and a half mile from the centre of the flourishing city of Rochester, N. Y. on the south-east road leading from Monroe street east, and half a mile from the city, and containing a large barn, and fences—a fine orchard, good wood and water, &c. For further particulars, enquire on the premises, or address C. W. J. Rochester Post Office, N. Y. Post paid. Rochester, Dec. 20th, 1841.

THE NEW GENESEE FARMER,

AND GARDENER'S JOURNAL.

VOLUME THREE—FOR 1842.

THE Cheapest Agricultural Paper in the Union—10 to 16 Large Pages Monthly, (with engraving only 50 Cents per year.)

HENRY COLMAN, EDITOR.

(Late Agricultural Correspondent of the State Massachusetts, and Editor of the New Eng. Farmer.) Grateful for the extensive patronage which the New Genesee Farmer has received during the past year, the proprietor now has the satisfaction of announcing that the paper is such an encouragement for the year a constant and highly gratifying to the readers of the paper, and secured at a still more extensive circulation.

Post Masters and their Assistants, are authorized and specially solicited to act as Agents and remit subscribers for the Farmer. The low price at which it is published will allow of much pecuniary compensation to Agents, & it is believed they will find a reward in the benefits which result from the circulation of such periodicals in their neighborhoods.

Persons ordering papers are requested to strictly state the Towns, and be careful to write plainly the names of all subscribers, their Post Office, County, State; and in cases of sending the money with the order, so that the propriety of paying for the paper may be beyond all doubt.

TERMS.—If current money is sent (such as New York or New England bills) commission will be allowed as follows:

Seven copies, for.....\$3.00 Payment always to be made in advance.

Twelve do. for.....5.00

Twenty-five do. for.....10.00

No commission will be allowed on an account money is sent.

Address BATEMAN & COLMAN, Rochester, N. Y.

December 1, 1841.

ROCHESTER PRICES CURRENT.

CORRECTED FOR THE NEW GENESEE FARMER, MARCH 1, 1842.	
WHEAT,.....per bushel,.....	\$1.06 a \$1.
CORN,.....".....	44.....
OATS,.....".....	28.....
BARLEY,.....".....	44.....
RYE,.....".....	53.....
BEATS White,.....".....	52.....
POTATOES,.....".....	25.....
APPLES, Dried,.....".....	33.....
FLOUR, Superfine, per bbl.....	5.00.....
" Fine,.....".....	4.50.....
SALT,.....".....	1.25.....
PORK, Mess,.....".....	8.00.....
" Prime,.....".....	7.00.....
" per 100 lbs.....	2.75.....
BEEF,.....per 100 lbs.....	3.00.....
POULTRY,.....per lb.....	6.....
EGGS,.....per dozen.....	12.....
BUTTER, Fresh,.....per pound.....	12.....
" Firkinn,.....".....	10.....
CHEESE,.....".....	8.....
LARD,.....".....	8.....
TALLOW, Clear,.....".....	8.....
HIDES, Green,.....".....	5.....
SHEEP SKINS,.....".....	35.....
PEARL ASHES,.....100 lbs.....	5.00.....
POT,.....".....	5.25.....
WOOL,.....pound.....	30.....
HAY,.....".....	11.00.....
GRASS SEED,.....bushel.....	1.25.....
CLOVER SEED,.....".....	6.50.....

New York Market.—Aches—a small lot of Pots have been sold at \$9.30, and another of Pots at \$4.75.

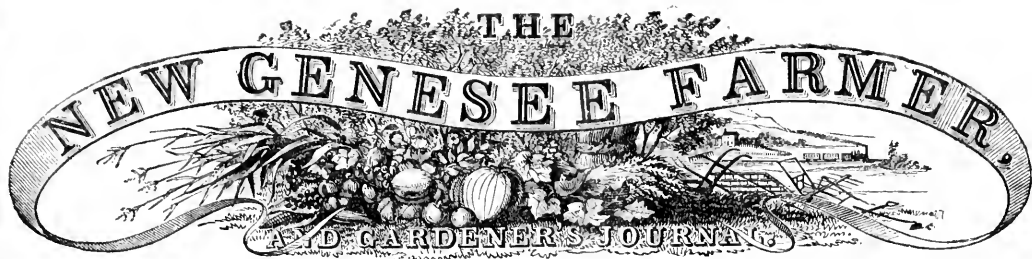
Flour.—There was no change in prices, and a full market 30 barrels of Flour were taken for export, at \$21.24 a \$21.25. Flour—There was no change in prices, and a full market 30 barrels of Flour were taken for export, at \$21.24 a \$21.25.

Nothing of importance was done in Grain. Seeds: do. sowing, at \$1.12 1/2 to \$1.12 1/2. do. 1/2 to \$1.12 1/2. do. 1/2 to \$1.12 1/2. do. 1/2 to \$1.12 1/2.

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From the Power-Press of J. I. Reilly & Co.



M. B. BATEHAM, Proprietor.

VOL. 3.

ROCHESTER, APRIL, 1842.

NO. 4. HENRY COLMAN, Editor.

PUBLISHED MONTHLY.

TERMS.

FIFTY CENTS, per year, payable always in advance. Post Masters, Agents, and others, sending current money free of postage, will receive *seven* copies for \$3.—*Twelve* copies for \$5.—*Twenty-five* copies for \$10.

The postage of this paper is only one cent to any place within this state, and one and a half cents to any part of the United States.
Address M. B. BATEHAM or H. COLMAN, Rochester.

For Contents see last page.

The Monroe County Agricultural Society

Held a Special Meeting on Thursday, 17th ult., for the purpose of fixing a list of premiums and arranging the time and place of the next Cattle Show. The business not being completed, the meeting stands adjourned to the 2d Tuesday in April, being the 13th day of April, at 10 o'clock, A. M., at the Arcade in Rochester.

Much interesting matter will come before the meeting and a general attendance is requested.

Gardening.

For remarks on the time for performing the different operations in the garden, we must refer our readers to the two former volumes of the Farmer. More particular directions for cultivating various garden crops, will be given in successive numbers during the present spring and summer.

Rolling Wheat in the Spring.

Mr. Colman—

It is evident that much of the wheat through the country, especially on moist mucky lands, is injured by the frequent freezing and thawing during the past winter. Unless something can be done to remedy the evil, to some extent, we have to fear quite a failure in the coming crop.

Farmers may say that they have done all that they can do to secure a crop; but there is one thing which, if done in season, may effect a great saving. Let every farmer who has not one, provide himself with a good roller, and as soon as the season of freezing and thawing is over, roll his wheat fields thoroughly, and I have no doubt that it would save thousands of bushels of wheat in Western New York, the present season. Farmers! try it, leaving a part of a field unrolled, and give to the community the result of your experience at some future time.

M. N.

Genesee Co., March, 1842.

Editorial Remarks.—Rolling and Harrowing Wheat.

The above advice is seasonable, and, we have no doubt, judicious. We should recommend something more than rolling; and that is, harrowing before rolling. As soon as the land is well dried, give your wheat fields a good harrowing, by passing over them with a horse harrow or one not too heavy; then roll them. In a fortnight or three weeks more go over them again with a harrow and a roller. Do not be afraid of destroying your wheat. Unless your harrowing is too heavy you will not displace or pull up many plants; and the advantages which those which remain will derive from the operation, will be a full compensation for any loss in this way. We have fully tested this matter more than once, having harrowed

our wheat crops twice in a season, and after the plant was eight or ten inches in height; and with decided advantage, having left in such cases parts of the field untouched with a view to determine the expediency or in expediency of the operation. The result has been highly beneficial. The effect of it is, by stirring the ground, to bring the air to the roots of the plant, and to loosen the soil so that they may extend themselves freely. This induces a vigorous vegetation, and causes the plant to tiller abundantly and throw out numerous shoots from the crown. We advise to harrowing only in one direction. The rolling will serve to break the clods and to fix the plants, which are thrown up, in the ground. In England, wheat is frequently sown in drills with a machine adapted to the purpose; and afterwards cultivated by a cultivator, contrived to pass through and loosen the soil in the rows, as we plough and cultivate between the rows of our Indian corn. This is said always to be beneficial to the crop, though with our imperfect means such refined tillage can hardly be looked for, and with prices of labor among us, might not be compensated.

We have yet to learn the value of constant tillage to the growing plant; and believe it would be found of the highest importance to our Indian corn to plough and cultivate it much more than we do. These suggestions coincide with the true philosophy of vegetation as far as it is understood, as such tillage causes a discharge of ammonia from the decaying vegetable matter in the soil, and quickens the receptive powers of the roots and leaves of the plant to take it in.

Value of Root Crops.—Mr. Sheffer's Practice.

Mr. Editor—

In order to show that all the farmers of Wheatland do not agree with Mr. Garbutt in the opinion that root crops cannot be raised *extensively* to advantage by farmers in this country, it is only necessary to refer to the practice and opinions of Mr. Geo. Sheffer, some accounts of which have repeatedly appeared in the Farmer.

In a conversation held with him a few days since, he stated that the quantities raised by him the past season were, as nearly as he could estimate, as follows:—

8 acres of potatoes, yielding	2,000 bush.
3 " of Sugar Beet and Mangel Wurtzel,	2,500 "
2 " of Carrots,	1,100 "
3 " of Ruta Baga, (injured by drought)	900 "
Making in all,	6,500 "

The Beets, Carrots and Turnips, he finds by actual calculation, cost him on an average less than 6 cents per bushel, including all expenses; and he considers them worth about double that price for feeding stock; the beets he feeds to cows, oxen, fattening cattle, &c.; the carrots for horses and hogs, and the ruta bagas for sheep.

His farm stock the past season consisted of—

60 head of horned cattle,
12 Horses,
190 Sheep,
128 Hogs, (56 fatted).

If Mr. Sheffer were as expert in the use of the pen as he is with the plough and hoe, he could easily furnish statements of the results of his experiments that would plainly show the advantages of root cultivation.

M. B. B.

Remedy for Choked Cattle.

Mr. Editor—

In last month's Cultivator I noticed a simple instrument recommended for unchoking cattle; but simple as it is, I consider it would be very dangerous in unskilful hands. Having some years ago lost two valuable cows by quite as simple a thing being pushed down their throats to unchoke them, I would by no means recommend the use of it. In discharging it, however, I will substitute a remedy quite as simple and efficacious, and much safer. Take a round stick about 12 inches long and the circumference of a common rolling pin, used for rolling out paste, cut a notch round each end of the stick and tie some twine in the notches; put the stick into the creature's mouth and fasten the twine round each horn to keep the stick in its place; when this is done, turn the animal into a yard, and have a little patience, and it will unchoke. I have tried this frequently, and never knew it to fail. I am not philosopher enough to explain the principle of this operation, but I imagine that the external air or the breath of the animal, or both together, act upon the substance and corrode it, so as to allow the creature to swallow it. Be that as it may, you may rely on the practical result. Yours truly,

January 20, 1842.

B. M.

AGRICULTURAL INTELLIGENCE.

HEREFORD AND IMPROVED DURHAM CATTLE.—It is stated that at the great Agricultural Cattle show last autumn at Smithfield, the largest ever holden in England, out of eleven premiums open to general competition, the Hereford oxen took

Three First Premiums,
Two Second Premiums,
One third Premium.

The Durham oxen took

One First Premium,
Two Second Premiums,
Two Third Premiums.

Earl Spencer, the great advocate and breeder of Durham Short Horns, admitted the defeat; but expressed his determination to beat the Herefords next year. We shall see.

FARM SCHOOL.—Benj. Bussey of Boston, lately deceased, with most distinguished liberality, has left, at the decease of some heirs, half of his estate, valued at more than 300,000 dollars, for the establishment of an agricultural school on his beautiful and highly cultivated farm in Roxbury, six miles from Boston. It would be difficult to find a more eligible location for this object; and the farm is one of the most improved in Massachusetts. No expense has been spared in its cultivation; and the stone walls upon it in particular, for their firmness and beauty, considering their extent, are not equalled in the country.

CORRESPONDENCE.

Nothing could be more gratifying to us than the reception of the subjoined letter and the annexed communication under the head of 'SCIENTIFIC AGRICULTURE.' It is the bright face of an old friend in a strange land. Who does not know the sunshine, which such an incident at once pours into the soul. We welcome him to our columns in fulfilment of his promise; obligations which so few men are apt to remember at a distance of four hundred miles. We beg to assure our readers that communications from this source will always be entitled to the highest respect and confidence. Our plainest matter of fact men will not, we hope, be deterred from their pursuit. Facts are valuable; and not less important must it be in many cases to know the reasons of those facts. To search into the causes of things, and if possible, to unravel the mysteries of nature, is one of the highest exercises of the human understanding. Our line is limited, but let us not think that we have reached the end of it, while we have the power of trying to go farther. Truth does not always float upon the surface of things. The pearl-divers of the Indies fearlessly plunge even into the troubled waters, and the most precious shells are often brought up from the lowest depths.

MY DEAR SIR—

I beg to hand you the inclosed for your perusal, and if you think fit, for publication in the New Genesee Farmer; if you approve and publish it, I will follow it up, if not I shall not be the least disappointed. The reason I write is that although Liebig's work is pretty generally distributed, yet, in order to get our farmers to understand something of the subject, it is necessary to keep the subject continually before them; and I also think that the more the subject of agriculture, or farming let us call it if you please, is elevated by being yoked to science, the more the practitioner will feel his mind and his pursuit elevated, and the more ability and dependence on his own judgment and powers will result. In other words, the more mind is used in the pursuit, the more will it be raised in general estimation, the more inviting will it become to the general population of the United States, who, if it be a fault, certainly possess that of too often abandoning the mechanical for the mental industry, to the great depression of agricultural industry, and the too great elevation of speculative or inventive conceits. Yours, J. E. T.

Boston, February 15, 1812.

On Scientific Agriculture,--Letter 1st.

I beg to congratulate you on your assumption of the editorial chair of a publication whose object is to support and promote the most important and prominent interest of this great country, AGRICULTURE; and while I congratulate you, I feel that I may with equal justice, congratulate the agricultural community on the assumption of this important office by one who, sensibly alive to all the mechanical and practical parts of this great science, yet does not lose sight of that mental part of it which is beginning to be developed by the writings and studies of men of the most cultivated intellect of the present day.

It will be readily imagined that I refer chiefly to those scientific principles of agriculture, the discovery of some of which, and the stability imparted to others which had been already broached, will forever reflect honor on the name of Liebig.

These principles are not only receiving daily confirmation by the labors of science in every civilized country, but are also being considerably extended; and as utility is the foundation of all the recent researches on this subject, it is almost certain that the results of many of them must be of incalculable advantage to the farmer.

In an admirable discourse lately delivered before the School of Medicine at Paris, Mr. Dumas has discussed with singular ability, the science of the vegetable

kingdom: with the assistance of this and many of the principles developed by Liebig, I propose to address a few letters to the farmers of the United States, chiefly with the view of enabling them to understand not only these new views, but to follow and judge for themselves of the application of many future principles which are certain to be hereafter developed, perhaps in rapid succession, from the immense labor now bestowed on the subject.

It is a task, however, which I approach with much doubt, not, perhaps, so much from want of understanding as from a want of power to explain with sufficient simplicity and clearness, a scientific object to unscientific minds. Should I succeed in enlightening a few, my pleasure will be great; should I fail, it is only in an object where thousands have failed before me.

The subject proposed is a brief account of vegetation, its wants, and the means of supplying those wants.

There are a few names in science which require a simple and popular explanation, as these names represent substances of which vegetables are composed and on which they are nourished. The first is CARBON—a solid substance of which the solid parts of vegetables are chiefly composed. When this carbon is combined with a gas called oxygen, it also takes the form of a gas, which is called Carbonic acid gas. All the carbon of which a plant is composed is taken up by the plant in the form of this Carbonic acid gas; the plant by its action, separates the oxygen from it, and retains the solid carbon; these additions of carbon constitute the growth of the plant,—hence the necessity of a sufficient supply of Carbonic acid gas, which is not only dispersed through the atmosphere in great plenty by the respiration of man and animals, but is also formed, according to Liebig, during the decomposition of humus or guano.

The next is AZOTE or Nitrogen—a gas forming part of a substance called ammonia, or rather of a salt of ammonium, as well as also, of salts called nitrates; this is chiefly used by vegetables in the very early formation of all their solid parts before the complete deposition of carbon from the carbonic acid.

Then HYDROGEN—a gas which, combined with oxygen, forms water; from the decomposition of water the vegetable obtains its hydrogen gas, which is used by it in the composition of the fat and volatile oils and resins which abound in many plants and seeds, and in the bright waxy varnish with which many leaves are covered.

Oxygen, also a gas—this and hydrogen gas mixed form water, this and carbon mixed form carbonic acid gas. Oxygen gas is absolutely necessary for the respiration of man and animals; they consume it hourly in large quantities—plants supply it to the air by separating it from carbonic acid when they want the carbon, and from water when they want the hydrogen of water. Besides these substances, the ashes of plants when burned, contain potash, soda, lime, silice, &c., these are taken up by the roots as watery solutions, and after due evaporation of the water through the pores of the leaves, are left in the plants.

Some plants require soda, others potash, others lime, and others silice; some require one, two or three of these substances in order to flourish luxuriantly.

We have then, to deal with a vegetable organized out of Carbon, Azote, Hydrogen, Oxygen, and the watery solutions of soda, lime, potash and silice, and from these few substances combined in different proportions among themselves, all the various pices, gums, stens, leaves, seeds, &c., of plants are formed.

It will be, therefore, of use to consider these substances separately, and to explain the mode of operation of each in the vegetable system, beginning with

CARBON.—It has been stated that the carbon required by plants, is obtained entirely by the decomposition of carbonic acid, effected by the powers of the

plant itself—that this carbonic acid is derived chiefly from the atmosphere is considered to be proved by many experiments, particularly by one of Boussingault, who sowed pease in pure sand and watered them with distilled water; in neither of these could there exist carbonic acid, yet they attained perfect development both of flower and fruit. He also inclosed vine leaves in a globe of glass, and then directed a stream of air upon them, from which they abstracted all the carbonic acid. In both these cases the carbon used by the vegetable was taken from the atmosphere. It is, besides, considered impossible that the earth surrounding a large oak tree, for example, should ever have contained a ten thousandth part of the carbon contained in the tree, so that the chief part of it must have been derived from the atmosphere.

When this carbonic acid is exposed to light in the leaves, it parts with its oxygen, the carbon remains behind in the solid shape of wood, vegetable fibre, cells, and various other forms, requiring for this purpose simple admixture with water. If twelve parts, called *molecules*, of carbonic acid are decomposed and lose their oxygen, they are combined with ten parts or *molecules* of water, and of this mixture is formed cellular and woody tissue, starch, and dextrine.

These substances are then of the same constituents, only they possess a different arrangement of their molecules.

Woody fibre, as well known, is insoluble;

Starch coagulates by heat;

Dextrine is soluble in water;

And yet these substances are produced by the same elements, combined in the same proportions, only differing in the arrangement of their molecules. The use of woody fibre is well known; starch is accumulated around buds and the embryos in seeds for their early nourishment; and dextrine is a watery solution conveyed by the sap to all parts of plants for its use.

How admirable the simplicity of nature, which out of the same substance can form three different ones, which can be converted into each other with the slightest expense of force, in changing the arrangement of their molecules.

It is also by means of carbon and water that the sugary or saccharine juices of plants are formed; twelve molecules of carbon and eleven of water, constitute the sugar of the cane which crystallises; twelve molecules of carbon and fifteen of water, constitute the sugar of the grape which will not crystallise.

These woody, amylaceous (starch) gummy, (dextrine) and saccharine (sugar) matters which carbon, in its nascent state, can produce by uniting with water, play so important a part in the life of plants that, when rightly considered, it is not difficult to estimate the value of truly understanding the decomposition by plants of carbonic acid, which, as is justly observed, is furnished in various ways by nature in such abundance as not to require the care of the cultivator.

Man, and all animals, consume a large quantity of carbon by slow combustion. The products of the combustion of carbon, whether quick, as when charcoal or anthracite coal, which are only other forms of carbon, are burnt, or slow as when consumed by man and animals, are heat and carbonic acid: the heat produced by the combustion of charcoal or coal, is well known; that produced by the combustion of carbon in the animal frame, is the heat of the body. Man and animals respire and breathe out, therefore, constantly a large quantity of carbonic acid, being the product of their slow combustion of carbon, this carbonic acid is taken up by plants, the carbon of it forming their growth and a portion of their organized parts, the

"A molecule may be explained as the smallest atom into which a simple or elementary body is supposed to be capable of being divided, and which many philosophers theoretically consider as being of certain definite forms.

HOME INDUSTRY.

Agreeably to promise, we enjoin the resolutions at a late meeting of the friends of Home industry in Rochester. Having been instructed to report them, they at least embody our own sentiments; and we see no reason to retract or alter them. We have at least no partisan views in the case.

In the present condition of society, it is idle to think of reaching the perfection of any thing. We shall be fortunate if in any case, we can reach the best possible. In respect to many things, right and wrong are intrinsic, absolute, unchangeable, and admit of no qualification; but in many cases duty grows out of circumstances; and that which would be unquestionably right and best in some cases, in a change of condition ceases to be obligatory or expedient. The doctrine of the free trade party, the peace party, the non-resistants, the no-government party, when justice is done to their principles and motives, breathe the highest philanthropy; but they seem utterly impracticable in the present state of society. We admire the generous aims of noble minds devoted to these great objects; but the loftiness of their purposes destroys the efficiency of their labors. The man who walks through the thronged streets of a city with his head turned and immovably fixed upon the stars, will be likely to strike against a post, to tumble into a gutter, or to run down many a passenger. Or if he undertakes to leap a chasm, which is too wide to be spanned by any human agility, it is not difficult to say where he will fall. Whoever would get along in the safest and best way for himself and others in the street must keep his elbows in, give as well as take, remember other men's rights, take care of his own; and while fixed in his determination to show no discourtesy, unkindness, or injustice towards those whom he meets, or who are travelling the same way as himself, and at the same time to preserve his own personal safety and progress, he must in some measure regulate his movements by the movements or dispositions of those about him. If he insists upon more of the side-walk than belongs to him he deserves to be jostled off. If he chooses to yield in every case, there will be enough, who, without compunction, will throw him into the gutter. If he chooses to step aside and remain until the crowd have passed, this disinterestedness will be fatal to all progress; and as wise as the determination of the traveller who sat down on the river's bank to wait until the waters should all flow by before he crossed.

We often admire the man, who yields his rights to others rather than maintain them against violence or oppression. This many times springs from a benevolence of the highest character, but often as mistaken as it is disinterested. If any man stood alone in this world, if his condition were not ultimately inseparably linked in with the condition of others, and if what extent no human imagination can determine, he might at pleasure make any personal sacrifices and yield any rights. But the condition of no human being living is thus insulated, and no man can yield any of his own rights without jeopardizing the rights of others, or establishing a precedent for an encroachment upon theirs. The doctrine of expediency, not in a low and contracted sense, but in the most elevated and comprehensive view, is the foundation of all right, because it is conformable to the will of God, which aims at the happiness of all men.

It would be charming indeed to see all men brought entirely under the dominion of universal love, in which every other man's happiness should be as dear to us as our own. This spirit of universal love and justice should actuate us; but how this spirit or principle will best exert itself in any particular case must depend upon the circumstances of that case. This spirit will have no other object than the production of

the greatest amount of happiness and good. But how is this to be effected—certainly not by neglecting our own to take care of the interests of other people. Our powers are at best small, and our sphere of action limited. Every man acts most efficiently in operating upon what is nearest to himself. Would a man then do most good, he must do what he can to mend himself, then to make his family happy, to provide for their welfare and happiness, and then his town and then his own country. Certainly he must violate no law of justice or kindness in doing this; he is not to seek to rise upon the oppression or injury of others; but within these rules, he must labor and can labor with success only in this direct manner. If every man should neglect his own family to take care of his neighbor's, neither would he be so efficiently or so well served as if each performed his duty to his own. In the present condition of human nature, therefore, the only principle upon which individuals or families, or larger communities, can properly act is not a mean and morose selfishness, which always leads to fraud and injustice; but an enlightened self-interest, which seeks continually to rectify wrong, to do good, to make good better and better best within its own immediate sphere. Here its powers will be most efficiently applied; here the effects of its exertions can be best watched over and controlled; and here consequently, it is bound first of all and constantly to exert itself.

Political Economy, though like every other science, very much mystified by men, who either want to make a parade of learning or else having no clear ideas on any subject, stir up the mud from the bottom when they get cleft into the clearest water, or otherwise, who want to controvert the plainest and most established principles, and instead of conforming to nature are vain enough to think they can make her conform to their notions, is as simple as domestic economy, and rests upon precisely the same principles. The best ordered and the most prosperous family is that, which seeks as far as it can without the most obvious disadvantage, to supply its own wants from its own resources within itself. If it demands the aid of others it will first be sure of the means of paying for that aid, and especially be equally certain that others will be willing to receive their pay in the products of its own industry. It will in no case encumber itself with debt, unless it be that wholesome credit for the sake of productive improvements or investments, where the provision for the extinction of the debt is sure as any thing human can be, and made when that credit is assumed. It will seek first of all to give employment to every member of its own household in the various forms to which their capacities, dispositions, or habits are best adapted, because the interest of each one is the interest of all, the duties and obligations are reciprocal and thus the productive power of all is most certainly and successfully availed of. Above all, it will spend nothing for superfluities until necessities are provided, nothing for elegancies until comforts are obtained. Then there can be no objection to the innocent luxuries and elegancies of life, where there are the means of paying for them from the surplus profits not needed or required for the equal comfort and benefit of all the members of the household. This is sometimes stigmatised as a Robinson Crusoe and selfish system. We only add that in its moral tendencies upon character, improvement and domestic happiness, it has proved itself over and over again in the highest degree salutary. Certainly it cannot be pronounced either selfish or inhuman, if we open wide the doors of the household and offer an equal share in all the domestic benefits, to every man, who is willing to throw in his lot among us; and give for the common benefit, all the advantages of his talents, service, education, knowledge and skill. This is true domestic economy and true national economy; and

thus every encouragement should be given to home industry. Without regard to any other people or country, we are bound first of all to provide for ourselves. In seeking to make our own country as industrious, as prosperous, and as independent as we can, we best serve the public good and the good of all; and on the highest principles of christianity nothing more can be demanded of us than that noble principle incorporated into our constitution, which offers our country as a free asylum for the unfortunate and oppressed and downtrodden of every land; and admits them to a full participation of all our civil and social benefits, upon the reasonable conditions of good conduct and a due subordination to the laws and institutions of the country.

The committee reported the following resolutions:

1. Resolved, That labor is the creator of wealth and the conservator of it.
2. That Government, established for the general welfare, is bound to protect and encourage the wholesome industry of its people in all its forms.
3. That the true independence of an individual, a family, or a nation, consists in its ability to supply its own wants from within itself, in the exertion of that ability, and above all, in keeping clear from debt.
4. That the interests of the whole people are one and indivisible. The eye cannot say unto the hand, I have no need of you, nor the head to the feet, I have no need of you. The poor are dependent on the rich; the rich equally dependent on the poor; the laborer on the employer, the employer equally upon the laborer; and the interests of the agricultural, the mechanical, and the commercial classes—of him whose capital is money, and of him whose capital is skill, and of him whose capital is knowledge, and of him whose capital is labor—are the same and indivisible.
5. That on every principle of public good as well as of equity, governments are bound to cultivate and strengthen the ties of mutual dependence among its people, so that the products of the skill of the one may be exchanged for the products of the labor of the other; that where such a mutual intercourse is secured against the disturbance of foreign influences, prices and values will adjust themselves to a fixed and equitable standard, and 'live and let live' will be the universal rule.
6. That to admit to an equal competition with our own, the products of foreign labor, must tend to reduce our laborers to the condition of these unfortunate foreign operatives, whose oppression and degradation compel them to toil, not for the comfort of life, but for a mean and bare subsistence.
7. That a home market ought on every account to be encouraged, as most important to our agriculture, and to all our productive classes.
8. That every article which we can produce ourselves, should either be absolutely prohibited from abroad, or admitted under such restrictions as to discourage its introduction, and to encourage its production at home.
9. That the tendency of a discriminating tariff, founded upon this plan principle, is not in the end to increase prices, but to equalize and reduce them; and even if its tendency were otherwise for a time or to a degree, the man who lives upon his money has little right to complain, since it is only reasonable that his money should be expended for the benefit of those by whose labor it has been earned, and by whose power it is protected.
10. That a trade with a foreign country to be free, should be on terms of perfect reciprocity.
11. That the restrictions upon our trade which are imposed by any foreign nation in refusing to receive the products of our industry in a fair and equitable exchange for the products of her industry, can be properly met only by an absolute refusal to receive her products at all, or by such countervailing and corresponding restrictions on our part as shall serve to equalize the traffic.
12. That holding the above principles as evident and undeniable, we respectfully transmit them to our Representatives in Congress with a request that they would so dispose of them in reference to any measures that may be taken on the tariff of duties the present session, as shall best serve the views and wishes of this meeting of the citizens of Rochester as thus expressed.

Our partial deficiency in plates this month will be compensated in the next number. Mr. Sherwood's bull did not show his horns until too late to bring him on the turf.

NITRATE OF SODA.

We are much obliged to our good friend for the subjoined communication. We are glad of the information which it furnishes on a subject which must ultimately be of great importance to wheat growers. We shall presently follow it up with more full information on the matter. He could not have made us a promise more gratifying than that he will communicate to us the earliest valuable agricultural intelligence which comes within his purview. His foreign correspondence furnishes in this respect peculiar advantages. We hope likewise to hear from him occasionally on the subject of Horticulture. No man is more competent.

Extract from a private letter.

"Being desirous to communicate to you on the subject of Nitrate of Soda, received from London by the arrival of yesterday, I also include the subjoined statement on the subject, on the chance of your not having received it.

The Gardener's Chronicle of January, edited by Lindley, contains an extract from the report made to the Bath and West of England Agricultural Society, by Mr. G. Webb Hall, and of course entitled to the fullest credence. A piece of land of which the wheat crop previous to 1838 was not worth gathering, was, in 1839, 1840 and 1841, manured with a new (artificial or compounded) manure, and each of these years sowed with spring wheat; the first year the crop was 5½ sacks per acre, weight 64 lbs. to the bushel; the second year 6 sacks, and 1841 nearly 7 sacks per acre, the straw each year extremely heavy and fine. The manure is cheap, averaging cost 20s. sterling per acre. Observe here particularly, *no rotation*, each year wheat, and each year an increased product. The manure was not named, but the man who helped to make it says it was *Carbonate of Ammonia*. On this statement Mr. Lindley observes that he does not see why Sulphate of Ammonia, which would be obtained by strewing the stables with Gypsum as mentioned in the books, would not do as well. Now Mr. Lindley is no chemist, and I differ from him in opinion, for the following reasons: When a sulphate is decomposed in any other way than by the complete saturation of the sulphuric acid by another base, fumes of sulphuric acid or sulphurous acid gas are probably created, than which gas there is nothing more injurious to vegetation, even in the smallest quantity; this has been proved by various quite recent experiments. I have lately tried *pure* sulphate of ammonia on Geraniums, which were nearly killed by it; but I do not offer this as conclusive against the sulphate formed by gypsum,—this is an experiment I should like to see tried by farmers on a large scale, and I have no doubt several are now trying it. With carbonate of ammonia both the carbonic acid gas and the ammonia are highly useful to vegetation.

Now for the Nitrate of Soda. London, 15th February, 1842. The sale of Nitrate of Soda for agricultural purposes, is pretty brisk; the price is 21s. sterling to 24s. 6d. per 112 lbs., about 2000, say two thousand bags were sold for this purpose during the month of January, 1842. The stock of this article in London and Liverpool at the end of each year, 1840 and '41, averages from 21 a 25,000 bags, a pretty clear proof that the demand for it is pretty steady, and the value of it as an agricultural manure ascertained. Saltpetre, which is used for more, and vastly more villainous purposes than for manuring the land, sells at from 26s. 6d. to 28s. 6d. per 112 lbs."

Boston, 12th March, 1842.

J. E. T.

For the New Genesee Farmer.

Gypsum—Information Wanted.

Liebig considers urine as the richest of all excrementitious manures.

"Human urine is the most powerful:—that of

horses and horned cattle contains less [ammonia,] but infinitely more than the solid excrements of these animals." * When it is considered that with every pound of ammonia which evaporates, a loss of 60 pounds of carbon is sustained; and that with every pound of urine, a pound of wheat might be produced, the indifference with which these liquid excrements are regarded, is quite incomprehensible."†

"In dung reservoir a well constructed and protected from evaporation, [the ammonia] is retained in the state of solution; and when the putrefied urine is spread over the land, a part of the ammonia will escape with the water which evaporates; but another portion will be absorbed by the soil, if it contains either alumina or iron; but in general only the nitrate, phosphate, and lactate of ammonia remain in the ground.—The loss suffered [by the escape of carbonate of ammonia] is nearly equal to one half of the weight of the urine employed, so that if we fix it [one half will be saved.]"

To fix it, he proposes to strew gypsum over the field, and then the putrefied urine or drainings of dung hills, so that all the carbonate of ammonia may be changed into sulphate of ammonia which cannot fly away, but will remain in the soil.

He adds however, "there are still simpler means of effecting this purpose:—Gypsum, Chloride of lime, sulphuric or muriatic acid, and super-phosphate of lime, are all substances of very low price, and completely neutralize the urine, converting its ammonia into salts that possess no volatility."§

But I have not found any further directions in regard to the application of these substances. He informs us indeed, that 100 pounds of burned gypsum would fix as much ammonia in the soil as 6,250 pounds of horse's urine would yield to it; or that 1 pound of gypsum would fix the ammonia in 62½ pounds of urine. But 62½ pounds of water (1000 ounces) would only dissolve 2½ ounces of gypsum, at the rate of 400 parts of water to 1 of gypsum; and therefore we want a barrel of water in addition to dissolve gypsum enough to fix the ammonia in 62½ pounds of urine. In other words: the urine would not dissolve one sixteenth of the gypsum necessary to fix the ammonia.

How then can gypsum strewed in stables (according to Liebig's directions) which must be dissolved, to save all the ammonia that forms there?

My object in making this question is to acquire information. I have tried to understand the subject, but may have much yet to learn; and if I am wrong, I should feel grateful for being set right. I want some cheap reservoir or method, to save urine from waste; but if I must add a barrel of water to every six gallons of urine, it must be a troublesome concern, and I should prefer manure, or old lime, or even pulverized charcoal. I have no fancy for distributing liquid manures.

AN ENQUIRER.

Editorial Remarks.—Liquid Manure and Urinaries.

We are not certain that we quite understand the difficulties of our respected correspondent, as we do not understand that the gypsum must be dissolved in water in order to absorb the urine, and so fix the ammonia either in the stables, or when spread upon the ground. Of course it is supposed to be finely powdered.

Our friend knows as well as we do, that in Flanders the urine vaults are made under their stables and cemented so as to be water tight. Here it is mixed with rape dust, and carried out in tanks, often upon the shoulders of the women, and sprinkled upon the growing crops; a process, which cannot be considered as at all superior to the best *ca de Cologne* in im-

proving their personal attractions. Detestable indeed must be such practices. But better methods have been adopted, where, as I have seen, troughs or channels have been laid behind the cattle stalls; and all the urine conducted to a covered cistern or receptacle, from whence it was pumped out at intervals into a machine drawn by one or more horses, like what is used for watering the streets of Cities, and distributed over the fields. The beneficial effects in such cases have amply compensated the expenses. When designed however to be so distributed, strainers must be carefully affixed to the conduits, or otherwise the machine will not distribute it. It will bear also being diluted to some extent in the cistern with advantage.

We have likewise known a cow stall with a vault extending the whole length of it, four feet wide, and three feet deep, carefully stoned and cemented so as to be water tight. The cows were tied in the stalls every night in the year. The vault was emptied two or three times a year, being as often filled with muck or loam, which became thoroughly saturated with the urine admitted through holes in the floor. The boards of the floor were easily removed and replaced, and a large amount of most valuable manure was made in this way. This is a very homely subject, we know; and the fastidious we hope will not look at it; but there is none which more essentially concerns a farmer's interest, and scarcely less, the cleanliness and health of his premises.

Holderness Cattle and Hollow Head.

To S. St. John, who inquires about the Holderness breed of cattle, we answer that they came originally from Holland into the counties of Durham and York, in England. They were coarse and thin animals, but yielded most abundantly in milk; the milk however, of an inferior quality; the distinguished breeders of the Teeswater cattle crossed their best stock with the Holderness, and from this cross with some variations, have sprung the Yorkshire cows, which are the most celebrated in the London Dairies or milk establishments. These Yorkshire cows are, properly speaking, Improved Durhams, and therefore, many of the Improved Durhams may be regarded as abounding in the Holderness blood, the cross of the Teeswater having improved their shape, lessened in some degree their yield of milk, and given them a tendency to fatten.

The weight of the bull at three years old, which he describes at 21 to 2200 lbs., is an evidence in favor rather than against his being an Improved Durham. When he asks us to give him the marks, which show the Hollow Head, we can only say that we know nothing of this deficiency in brute animals; but poor soul! have ourselves labored under the complaint all our lives; and if he wishes to know more about it, he must surely apply to a full head for an explanation.

Mildew upon Gooseberries.

Advice from one competent to give it—"Say to the growers of gooseberries, if they wish to keep off mildew, train your bushes so as to admit a free circulation of air through them; manure about the roots; and forget not to sprinkle them with soap-suds on washing days, three or four weeks in succession before blossoming; and they cannot miss having fine, fair, large berries. I know this by several years' experience. Let them try and see."

MUNIFICENT DONATION.—Give while you live; thus secure the purposes of your charity and gather the first sheaves of the harvest.

John Conant of Jaffrey, N. H., a spirited and intelligent farmer, has given his valuable farm of 230 acres with all its appurtenances, to the Cheshire County Agricultural Society for the establishment of an Agricultural Seminary. It is not many miles from Keene. It is a noble benefaction, and reflects upon him the highest honor.

* Organic Chemistry, 1st Amer. Edit. p. 138.

† p. 2.

‡ p. 246.

§ p. 255.

INTERESTING REPORT OF THE COMMISSIONER OF PATENTS.

Indian Corn for Oil.—Sugar from Corn Stalks.—Lard for Oil.—Silk.—Statistical Table.—Agricultural Patents.

The Commissioner has favored us with this important document. Mr. Ellsworth is entitled to the highest credit for his industry and zeal, especially in every thing connected with agricultural improvement. The report discloses enough to encourage the friends of an improved and extended husbandry, if even they may calculate upon a tithe of what is promised. Immense, however, as the agricultural produce of the country is destined to become, we fear that the picture is too highly coloured, and expectations held out which, in our humble opinion, may not be immediately realized. We acknowledge ourselves a little more than surprised at some of the statements.

We quote the following from the letter of the Commissioner:—

"The value of the agricultural products almost exceeds belief. If the application of the sciences be yet further made to husbandry, what vast improvements may be anticipated! To allude to but a single branch of this subject. Agricultural chemistry is at length a popular and useful study. Instead of groping along with experiments, to prove what crops land will bear to best advantage, an immediate direct analysis of the soil shows at once its adaptation for a particular manure or crop. Some late attempts to improve soils have entirely failed, because the vegetable, transported at considerable expense to enrich them, was already there in too great abundance. By the aid of chemistry, the West will soon find one of their greatest articles of export to be oil, both for burning and for the manufactures. So successful have been late experiments, that pork (if the lean part is excepted) is converted into stearine for candles, a substitute for spermaceti, as well as into the oil before mentioned. The process is simple and cheap, and the oil is equal to any in use.

Late improvements, also, have enabled experimenters to obtain sufficient oil from corn meal to make this profitable, especially when the residuum is distilled, or, what is far more desirable, fed out to stock. The mode is by fermentation, and the oil which rises to the top is skimmed off, and ready for burning without further process of manufacture. The quantity obtained is 10 gallons in 100 bushels of meal. Corn may be estimated as worth 15 cents per bushel for the oil alone, where oil is worth \$1 50 per gallon. The extent of the present manufacture of this corn oil may be conjectured from the desire of a single company to obtain the privilege of supplying the light-houses on the upper lakes with this article. If from meal and pork the country can thus be supplied with oil for burning and for machinery and manufactures, chemistry is indeed already applied most beneficially to aid husbandry.

A new mode of raising corn trebles the saccharine quality of the stalk, and, with attention, it is confidently expected that 1000 pounds of sugar per acre may be obtained. Complete success has attended the experiments on this subject in Delaware, and leave no room to doubt the fact that, if the stalk is permitted to mature without suffering, the ear to form, the saccharine matter (three times as great as in beets, and equal to cane) will amply repay the cost of manufacture into sugar. This plan has heretofore been suggested by German chemists, but the process has not been successfully introduced into the United States, until Mr. Webb's experiments at Wilmington, the last season. With him the whole was doubtless original, and certainly highly meritorious; and, though he may not be able to obtain a patent, as the first original inventor, it is hoped his services may be secured to perfect his discoveries. It may be foreign to descend to further particulars in an annual report. A minute account of these experiments can be furnished, if desired. Specimens of the oil, candles, and sugar, are deposited in the National Gallery.

May I be permitted to remark that the formation of a National Agricultural Society has enkindled bright anticipations of improvement. The propitious time seems to have come for agriculture,

that long neglected branch of industry, to present her claims. A magnificent bequest is placed at the disposal of Congress, and a share of this, with private patronage, would enable this association to undertake, and, it is confidently believed, accomplish much good.

INDIAN CORN MEAL FOR OIL.

It is added in the report, "that it is said that the meal, after the oil has been extracted, will make harder and better pork when fed out to swine than before. The oil is of a good quality and burns well." These are certainly extraordinary facts and we shall wait with some impatience for their verification. We should be glad to know whether the meal remaining after the oil has been extracted, is of sufficient value to pay the cost of extracting the oil; and whether, after passing through this process, it can be kept any length of time. That the corn after going through this process will make harder pork, is not improbable; but that it will make better pork is likely to depend, it may be, somewhat upon our preference for lean or fat pork. It is difficult to settle questions of animal nutrition, unless in such cases as that of Dr. Beaumont, where the patient has an open window into his stomach; but, it is generally supposed, that the oily part of the food was that which went principally to form the fat of animals. That Indian Corn should yield the farmers fifteen cents a bushel, unless the residuum is of equal value with the oil extracted, is, however, not a great encouragement to its production even on the rich prairies and alluvions of the West. Their average crop, unless with extraordinary cultivation, in Illinois, for example, is not more than forty bushels per acre; but put it at sixty, the product would be only nine dollars. Now deduct the ploughing, which is not less than two dollars; the planting not less than a dollar; the cultivation, even with a horse harrow only, not less than one dollar more; the harvesting, which must be two dollars; the husking and cribbing, which must be three dollars more; and the cost of the land and fencing, and other expenses of management, there will not be a very large profit remaining, unless we can pay for our labor at fifteen cents, or a bushel of corn per day. We say nothing of the grinding of the corn, which we know, at one of the principal mills in Illinois, costs three pence, or eighteen and three quarter cents per bushel. But domestic mills may be introduced. We are not willing, however, to say more on this subject until we know more. Perhaps, with our imperfect information, we have already said too much.

SUGAR FROM CORN STALKS.

Another great article of product spoken of in the report, is that of Sugar from Corn Stalks. "A new mode of raising corn, trebles the saccharine quality of the stalk." This is certainly an extraordinary discovery. The stalks of corn, if gathered before the ear is formed, it is here stated, yield of saccharine matter three times as much as the beet, five times as much as the maple, and fully equal, if they do not exceed, that of the ordinary sugar cane in the United States. "One thousand pounds of sugar, it is believed, can easily be produced from an acre of corn. It has been ascertained, by trial, that corn on being sown broadcast [and so requiring but little labor, comparatively, in its cultivation,] will produce five pounds per square foot, equal to 108 tons to the acre for fodder in a green state; and it is highly probable that when subjected to the treatment necessary to prepare the stalk, as above described, in the best manner for the manufacture of sugar, a not less

amount of crop may be produced. Should this prove to be the case, one thousand weight of sugar per acre, might be far too low an estimate. Should the manufacture of sugar from the corn stalk prove as successful as it now promises, enough might soon be produced to supply our home consumption, towards which, as has been mentioned, at least 120 millions of pounds of foreign sugars are annually imported, and a surplus might be had for exportation."

These statements may well be called startling; but we must be pardoned if we consider them, in some measure, of the *multum in parva* variety. We have a high respect for Mr. Ellsworth; we believe there is not a letter officer in the government; and that no man living would be more reluctant to make a misstatement than himself. But we want a good many more facts and experiments in the case, before we can yield entire confidence to such predictions. The whole, for aught that appears, grows out of a statement of a Mr. Webb, of Delaware, given in our November number, who obtained from a small piece of ground at the rate of 100 lbs. of sugar to an acre, and who states that further experiments showed conclusively that the produce might be increased ten-fold. Now we have no desire to question Mr. Webb's veracity; but it will be observed in the first place, that he has not yet obtained 100 lbs. to an acre, but only at that rate; and in the second place, that although experiments to him have conclusively shown that a thousand pounds may be obtained to an acre, yet we do not know what those experiments were, and the conclusion is matter of inference or private judgment. We shall be exceedingly glad to be set right on this subject.

The calculation of producing green corn fodder at the rate of 108 tons to an acre, is, we believe, more easily asserted than proved. We should like facts in this case much better than conjecture.

Tall meadow oat grass has yielded, green, at the rate of 16,325 lbs. per acre, and dried, 5717 lbs. Millet has yielded, green, at the rate of 12,251 lbs. per acre, and when dried, 4747 lbs. Herds grass, when green, 40,837 lbs., and dried, 17,355 lbs., or when cut after the seed is ripe, 19,397 lbs. A crop of Herds Grass producing when cured, 17,355 lbs., is indeed enormous; and what very few among us have ever seen, less than five tons being the largest measured crop, which has come within our knowledge. We have never known a crop of green corn fodder weighed, when cut for fodder, but we have given in our last No. the weight of an acre of corn fodder of the gourd seed variety, when cured, including husks, and yielding 66 bushels of grain per acre, and the whole amount of that was 2 tons, 13 cwt., 13 lbs. In the case of herds grass, the proportion of green weight bore to the dried as 46 to 17 or as 20 to 8 tons. If we may infer any thing from this fact in regard to Indian Corn, we may reckon the green fodder from such a yield of corn as 6 to 7 tons. It would, however, be much more than this, if the corn had been sown broadcast; and perhaps may be quadrupled. Conjecture, however, is idle in a case where, we hope, we may soon have facts. It is supposed in the case of the Report, that the corn is to be sown broadcast and yield at the rate of five pounds to a square foot. This is a remarkable calculation; and if corn is sowed thus thickly, how is it to be got at to pluck off the ears, which is said to be a necessary part of the process? A few months however, will settle this; and if an acre of corn, by the mode described or any other mode, can be made to yield five hundred pounds of sugar, we

shall throw our hat up as high as any one in the crowd.*

LARD FOR OIL.

Another prospect held out to the farmers is, that of converting their lard into oil and candles. Lard has been used by many persons for lights, and has been adopted, it is said, in the light-houses in Canada on the Lakes.

"But it has now been discovered that oil equal to sperm can be easily extracted from lard, at great advantage; and that it is superior to lard for burning, without the necessity of a copper tubed lamp. Eight pounds of lard are equal in weight to one gallon of sperm oil. The whole of this is converted into oil and stearine, an article from which candles, that are a good substitute for Spermaceti, can be made. Allowing then for the value of the stearine above the oil, and it may be safely calculated that when lard is six cents per pound, as it is now but four or five cents at the West, a gallon of oil can be afforded there for fifty cents; since the candles from the stearine will sell for from twenty-five to thirty cents per pound." Now we are not certain, though we have read this passage several times, that we understand the elements of this calculation.

The quantity of oil obtained from eight pounds of lard is not stated, nor the quantity of stearine. But oil and stearine in sufficient quantities, as we understand the statement, can be obtained from eight pounds of lard to pay for the manufacture and to produce a gallon of oil equal to sperm oil, and of the value of 1.50 cts.; and as this comes from eight pounds of lard, the actual cost is only the price of the lard, 48 or 50 cents. Under such a process, how long may it be calculated that oil will remain at 1.50 cts. per gallon, or spermaceti candles at 25 to 30 cents per pound? This certainly, if we understand the statement, and we are by no means certain that we do, is sufficient encouragement to make our hogs all lard if we can so contrive it; and especially, if it can be done upon corn after the oil has been extracted. (See above, page 54, column 3, line 8.)

OIL FROM CASTOR FEAN.

The Report refers in the next place to the extraction of stearine from the castor bean, which is said to have been successfully practiced at Alton in Illinois. We hope some of our friends in that region, if perchance they should see our humble sheet, will give us without delay some information on this subject.

SILK.

On the subject of **SILK** the Report presents, it must be admitted, some golden prospects. The fact that in one year our importation of silk goods exceeded 20,000,000 dollars, is very often referred to in discussing the subject of silk growing; but we believe the average import for several years has not much exceeded from seven to twelve millions. In 1839-40 it little exceeded ten millions. This is just ten millions too much. The Report calculates that "should one person in a hundred of the population of the United States produce annually 100 lbs. of silk, the quantity would be nearly 18,000,000 pounds, which at \$5 per pound [and much of it might command a higher price] would amount to nearly \$90,000,000, nearly \$30,000,000 above our

*Since penning the above, we have seen it stated in some exchange paper, that forty tons of green corn had been obtained from an acre in Worcester Co., Mass.; and at a late agricultural meeting in Boston, the editor of the New England Farmer is reported in the Ploverman to have said that he understood that 100 tons of green corn had been cut from a single acre in three cuttings, in a season, and he had known 37 tons cut on an acre at one time.

We have no disposition to impugn these statements in the smallest measure; but we should be exceedingly glad to know when and where these crops were produced; and how and when the amount was ascertained.

whole cotton exports, nine times the value of our tobacco exports; and nearly five or six times the average value of our imports of silk." This is what we call dreaming with one's eyes open. How can sober men indulge in such calculations as these? What sort of a population have we that one in a hundred, of the three millions of slaves too, shall produce one hundred pounds of silk each annually, or at that rate; and who can suppose that if we should produce 18 million pounds of silk, that it would retain its price of five dollars per pound, or indeed one half of it? Why we should have to carpet our rooms with it and use it for dish-cloths.

But we found no difficulty in accounting for this flight of the imagination in the Report, when we came to look at the statistical tables obtained by estimate, for 1841. Here it is said that in Massachusetts there were produced in the year 1841,—198,432 lbs. of silk cocoons. Now we believe that in the whole of Massachusetts there are scarcely mulberry trees enough to feed the worms that would be required to produce half that number of cocoons. But we are not without light in the case; and there are some facts which may wake us up and bring us to our senses, if it is possible that we have relied upon the returns in these statistical tables, obtained by estimate.

"A law was passed in Massachusetts in 1836, allowing a bounty of one dollar for every ten pounds of silk cocoons produced in that state. Under that law, the whole amount which claimed the bounty, and this included likewise, all that were reeled or thrown for four years from 1836 to 1840, both inclusive, was 11,000 lbs. 1 oz., and of reeled and thrown silk, 757 lbs. 8 oz.; and in 1841, as returned by the United States census, the whole amount of silk cocoons produced in Massachusetts that year, was 1,741 lbs, which is undoubtedly much below the truth. But for 1841-2, we have the authentic return to the Secretary's office of silk cocoons claiming the state bounty, from 10th of February, 1841, to 29th of January, 1842, amounting to 27,219 lbs. 5 oz., and 1390 lbs. 4 oz. of silk reeled, which is included in the above cocoons. This indeed is a most remarkable and encouraging increase, but 27,219 lbs. does not look much like 198,432 lbs. We know Mr. Ellsworth would make no mistatement nor willingly be imposed upon, with all his enthusiasm for agricultural improvement; but we are sorry to see Mons. Tonson, of multi-causal memory, come again.

STATISTICAL TABLES.

The Report presents a great many statistical tables of agricultural products obtained for the year 1841, by estimate.

We would not be captious or fastidious in the case. We think statistical knowledge of immense importance. But at the same time we have little confidence in returns which rest upon estimates and not upon actual inquiry. Take again the case of Massachusetts, in the article of wheat. In the return here for 1841, the amount is put down at 189,571 bushels. Now in 1838-9, when, on account of the bounty perhaps, more wheat was sowed in Massachusetts than in any one year before, the returns to the Secretary's office amounted to 103,570½ bushels, from which 45½ bushels were to be deducted for wrong returns. As the bounty was not given where less than 15 bushels were raised, there was some amount which was not returned; but it could not have been large. In 1840, as by the U. S. census, it amounted to 153,923½ bushels. There is no reason to suppose that the production has increased. There are

many other returns which, as they do not agree with information which we deem certain, we consider as erroneous. Most certainly there is no intention to misstate; and no wilful error; but judgment and opinion, or as it is termed, *estimates*, are extremely uncertain in all matters of statistical information, and there can be little hope of accuracy until Congress create a bureau or department or commission for this very object; ask returns from the States, and the States on their part by a very simple legislation, co-operate with Congress in obtaining, with all practicable exactness from year to year, this most desirable information.

AGRICULTURAL PATENTS ISSUED IN 1841:

Of the patents issued the last year for agricultural machinery, the following are among the articles:—

- | | |
|--|--------------------------------------|
| 4 Bee Hives, | 7 Ploughs, |
| 2 Churns, | 6 Seeding and planting machines. |
| 5 Corn Shellers, | 13 Snut Machines for cleaning grain. |
| 2 Cultivators, | 1 Straw Cutter, |
| 2 Hulling and Cleaning machine for clover seed, rice and grains, | 2 Threshing Machines. |
| 2 Mowing and Harvesting machines, | 1 Winnowing and Fanning Machine. |
| 2 Improvements in Scythes and Smiths. | |

The Report contains much other valuable matter to which we mean to revert hereafter.

For the New Gloucester Farmer,

Anti-Mousology.

There is perhaps no animal more pestiferous to the farmers than rats and mice. They sometimes destroy his seed when sown, prey upon his crops when growing, and when they are carefully secured after many a day of tedious labor in the barn, granary or cellar, they are sure to insinuate themselves into his repositories to feed upon and recklessly waste his substance. Even winter, with its penetrating frosts and piercing winds does not retard their movements, nor does summer with its sultry suns diminish aught from their labors. When deep snows mantle the earth, they will, unless precautionary measures are taken to check their labors, bark and destroy his young fruit and shade trees, and then, when spring comes on, with its genial suns to warm his heart into new efforts of taste and utility, it sinks coldly within him, and he often relinquishes his labors in the horrors of despair. By stamping down the snow around young trees and shrubs, the wholesale vendors of mischief may be nonsuited. The best way of banishing them from mows or bins of grain, and all similar places, we ever heard of, was scattering the branches of mentha viridis or common spear mint about in the rows when packing away grain, or strewn it over the bins of grain, casks of apples, &c., exposed to their depredations. We have tried it, so have our neighbors, and found it to be effectual.

W. B.

Mount Oseola, Feb. 1842.

Squash Culture.

This does not differ essentially from the culture of cucumbers and melons. Where they have too much tendency to form vines, which materially affects and diminishes the growth of the fruit, it is an excellent practice to break off the end of the vines, and hoe earth over it, thus diverting the juices of the plant from the growth of the vine to the fruit, thus increasing its size, and at the same time, preventing the stalk from running over an undue quantity of land.

We find baking the best method of cooking winter squash for our palate, especially the green Valparaiso. The process of baking requires no more labor than boiling where cooking stoves are in use, and the flavor of them is much increased, so as to resemble that of sweet potatoes.

W. B.

Mount Oseola, 1842.



ROCHESTER, APRIL, 1842.

To Readers and Correspondents.

We must claim indulgence. We have several valuable agricultural addresses and communications from valued friends and correspondents, which we cannot more particularly acknowledge in this paper.

We thank D. P. K. for the Transactions of the Essex Co., Mass., Agricultural Society, always valuable and instructive.

We acknowledge "The Muck Manual for Farmers" from its learned author, S. L. Dana of Lowell. We shall give an extended notice hereafter. We are confident, from a partial examination, that it is the most valuable contribution that Science has yet made to American Agriculture, and will take rank with the best publications of European learning and skill. We are happy, as far as we have read, to find a perfect confirmation of our own heretical views on several subjects. The style is transparent; and the information practical; just as they should be.

We have to thank a Canandaigua friend and a dozen others for very kind letters. We should have been home-sick without them. There is nothing like patting a boy, who wishes to do well, upon the head and giving him a hand when he is almost up to his chin in trouble; instead of giving him a kick and telling him to go to the d—oga. Some people may think we meant to have said a naughty word here, which we might have caught in Rochester, either at meeting or in the streets; but we did not, certainly; it is only an impediment we have in our speech.

To G. K., Geneva.—We shall be very glad of the plates of the Cotswold sheep, and promise to do them justice. Let us know what to say of his Berkshire pigs.

A correspondent in Ohio inquires "what will Mr. Allen take for a pair of his Berkshires?" Mr. Allen is in Buffalo, and we in Rochester, only 80 miles apart, and 80 miles nearer to him than to us. This honest inquirer ought to have a patent for his remarkably direct mode of doing business. Would he not like that we should send him our Farmer by Pomeroy's Express, via Boston and New York?

The subject of Madder is necessarily excluded by the length of the article on Hemp, which we commend to those interested.

S. W. on Tariff and Home League, J. E. M. on Agriculture, H. P. on Corning, two communications on Ploughing Matches, E. S. on Domestic Industry, E. B. on Bail, C. L. G. W. and others on Education, R. S. C. on Schools, M. A. on Winter Agricultural Meetings, W. G.'s corrected Statement of his Views, J. J. T. on Dials, &c., W. S. T. on Bees; and several others, are respectfully acknowledged and under consideration for the future.

Two articles on Threshing Machines will be more seasonable three months hence, if Heaven sends the manna.

The large Hog from Clyde, is in pickle for the next number.

We beg F. B. to let us know where we shall return his fifty cents, which we are anxious to do, together with his very gracious and courteous letter addressed to us.

"I heard a little lamb cry, ha!

Said I, you have lost your mam-a."

Some few small Inquiries.

The Secretary of the Wisconsin Agricultural Society, in a very polite letter, postage paid, very modestly says,—“I wish to know, (an inquiring mind is always to be commended)

1st. "The number of souls engaged in agriculture in your state?" We believe there are a good many more bodies than souls, or we should double our subscription list. Look at U. S. Census.

2d. "The number of acres of arable land occupied for agricultural purposes, and the estimated average value per acre?" A very pretty calculation this, to get the average value of land in a territory 500 miles in length, presenting every variety and diversity of soil and situation as it respects climate, products, market, &c. Will this Secretary please tell us what is the average weight of the inhabitants of Wisconsin taking all the men, women and children together; and please add how large is a piece of chalk?

3d. "The various kinds and aggregate amount of the agricultural products of the State for the year 1841, and their value?" The Census of the United States for 1840, which embraces this information, cost the labor of several thousand men and several hundreds of thousands of dollars. Probably in Wisconsin, being a territory, they never heard the census was taken. It can only be a trifling affair to get it for the little State of New York for 1841, and we shall set right about it and will forward a copy when completed. In the mean time, let him go to the Commissioner of Patents.

4th. "The most important and striking results of those associations formed for the purpose of promoting the agricultural interests throughout the state?" Come to our 30 agricultural shows next autumn, and see for yourself. It will not do to boast.

5th. "Whether agriculture has received any legislative aid; and if so what, and what effect such aid has had upon that interest?" New York appropriates among the several counties \$6000 dollars per year, divided according to their population, and given upon condition that each Society raises as much as it receives from the State to be bestowed in annual premiums for products, crops and animals. She gives a certain amount to the State Society for the same object. She gives likewise, a small premium on cocoons and raw silk. Agriculture is next to education her great interest. Instead of \$8000 she should give \$50,000; but at present, like her sister states, she has found a large hole in her purse, her shoes are down at the heel; and some propose that she should take advantage of the bankrupt act. It is hoped the little thing will get her spirits again, when the ugly ditch, where she has dropped so much of her money, is filled with water. Now, in the expended state of her public improvements, she seems to be in the condition of the man who undertook to descend the shaft of a deep coal mine by the rope. Before he got to the bottom he found himself, in an agony of terror, at the end of his rope. There he hung, with his legs doubled up, incapable of returning, and feeling that when he let go his hold certain destruction awaited him. The poor fellow, in this dreadful condition, deplored his folly, said his prayers, thought of his wife and children, and when he could hold no longer, shut his eyes—gushed,—dropped—and fell about three inches.

6th. "What effect has been produced upon the agricultural interests by the Tariff; and what, in your opinion, would be the operation of imposing a countervailing duty upon goods from those countries that impose a duty upon our exports of grain, &c.?" Ask Mr. Clay, Mr. Hudson, Mr. Calhoun, the Secretary of the Treasury, or Gen. Tallmadge of New York. These are all gentlemen of *entire leisure*, and would doubtless feel much honored and most happy to answer these inquiries.

7th. "What per centum of tax is imposed upon the capital invested in agriculture in your state; and in what manner would it be proper, in your opinion, for the legislature to grant aid to the agricultural interest?" In respect to the first, there is no specific or direct tax upon agricultural capital. In regard to the second, we intend to make this a special subject of consideration in the Farmer. We hope to hear from many of our correspondents in relation to the same matter, and should be highly gratified with the opinions of the Wisconsin Secretary.

In conclusion we respectfully advise that in the mean time the Wisconsin Agricultural Society should subscribe for 1000 copies of the New Genesee Farmer, and we will in such case give them our best notices on all the very trifling subjects proposed. Did the Secretary of the Wisconsin Agricultural Society ever hear that any body in this world ever had any thing to do besides eating his dinner and smoking his pipe?

"Ladies Saloon."

Positively no admission for gentlemen."

Zelia, came very near a breach of promise. Don't be late on the great occasion. Still incognito! We shall soon have a Junius excitement about you.

Here's a bevy of lasses! opening in beauty like the flowers of spring; full of sentiment, enthusiasm, poetry. "O! the days when we were young."

Flora has our respect for excellent sentiments, well expressed, of which we shall avail ourselves. Imagination is not wanting; but her rhyme flutters upon one wing. Her secret is safe; and let her often show "Mercy."

Sarah! you are a rogue. Stand up for the farmer's industrious daughters. They are the jewels of the land. Lift up your veil; and don't set us running after a "will of the wisp." We should like to see your milk pails and pails, your churns and cheeses.

Annette is too personal; why should you *pun*—ish an unfortunate youth in that style? The motto on the seal "a hand to give and a heart to forgive," seems a sort of "Return Jonathan." "The deadly arrow remains in the side." O, cruel, cruel, Barbara Allen!

The letter from Helen, referred to last month by Adolescents, was not seen by us until after the receipt of Annette's letter. It is the one published in the Farmer last September, page 141, on Female Self-Education. We have read it, and deem the inquiries highly reasonable and important. We have partially answered them in our reply to Adolescents; but will say more when we have more leisure. Such an inquiry is not to be dismissed with the brush of a pen.

The pretty lines from J. L. are accepted, with the exception of the two last stanzas. There the nag evidently broke his trot and got into a shuffle. A tighter rein, and a little more uprightness and firmness on the saddle, the certain result of skillful practice, and the plate is won.

The Weather.—The King Apple.

[In a letter from Cayuga county.]

Foretelling the weather—or rather guessing at it—is a common practice in this country. It serves to amuse a vacant moment. It would be quite a privilege indeed, for him that works in the open air to foreknow just when he might be pelted by the pitiless storm,—for according to the proverb, "forewarned, forearmed"—with a great coat or umbrella.

It was said in ancient times that no man was ever caught in a shower without due notice of its approach, so significant are the phases of the atmosphere; though in some countries without doubt, the indications of change are more certain than in other countries. Immigrants in this region of lakes and inland seas, often complain of the uncertainty of the weather; "there's no telling;" but after a time they get nearly as much

wisdom as their neighbors, "be the same more or less."

I admit that we may often judge with some correctness of the weather for the present day; possibly we may make a good guess in the evening of what will happen to-morrow; but the third day is entirely beyond our reach. *Not one of your readers can foretell the weather for three days in advance.* I may startle them indeed; but if they think I am wrong, let them bring the matter fairly to the test. Let two or more of them agree on what shall happen, and reduce it to writing. I give the form of such a minute, to be altered according to circumstances:—*Three days hence, the sun will rise without a cloud—mild and pleasant—in the west. In the afternoon, a snow-squall—then clear, succeeded by a sharp frosty night.*

"O, we can't be so particular as that." Well, how particular can you be? "Why we can tell whether it will be likely to rain or snow within a week or so." Yes, that may be well said in a rainy or snowy climate without adding much to our stock of knowledge; but you cannot tell the quantity that will fall. You cannot tell, for instance, when one of your friends comes a hundred miles in a sleigh to see you, and the snow goes off, how long he must wait for good sleighing to return; nor whether it would be better for him to stay a few days longer, or procure a wagon and go home. All our knowledge of the third day hence amounts exactly to nothing; and the sooner we become satisfied of this truth, the better it will be for us,—for we shall then not be disappointed, but prepared to take the weather as it comes.

Vague and indefinite pretension is a mere cloak for ignorance; but I believe that many persons are not aware of the deception that they practice on themselves. Numerous are the rules for determining the weather that is to come; and many who adhere to them, believe in their correctness; but this could not happen if they kept accurate records. They forget their failures, and only remember their successes. It would be strange however, in our variable climate, if they did not *hit* sometimes; and when they do so, that satisfies them. Two *misses* to one *hit*, has no permanent effect on their credulity. They console themselves with thinking that all signs fail sometimes—or the miss was merely accidental—or they came very near it—or something else.

All the rules that I have heard for judging of the weather, are entirely fallacious; and founded on no cause capable of producing such effects. The moon has been credited on this score to a great amount; but accurate registers, kept in one place for fifty years, and in another place for thirty years, show that she has nothing to do with the matter. The rules called "Herschell's" are spurious; and our observations have proved them to be utterly worthless.

Some judge of the weather by the aspects of the new moon—whether the points are turned up to hold the rain, or turned down to let it sprinkle us. Now all this depends on the relative positions of the sun and moon, easily calculated by any astronomer fifty years before-hand. The moon never strays from her orbit. But to show that all such rules are unfounded, it is only necessary to remark that one tract of country is deluged while another is suffering from drought. While we were parched the last season, the country 200 miles south of us, had rain in abundance. "We have had a wet summer," says a correspondent in that quarter, "except in the beginning of the sixth month. In the eighth month the water issued from the sides of the hills along the roads, as it does in the spring of the year." Now it is always raining or snowing on some parts of the earth, and always dry and parching on some other parts. All such rules must therefore be nonsense, and nothing else. Can the moon make wet and dry at the same time? It is absurd

for both often occur on the same meridian, or in the same latitude, and not unfrequently even in the same country.

Some say the last Friday in the month is the index of the weather for the next month. Why should it be so? There is no reason why. This notion, founded on nothing but a whim, could only have originated in the most deplorable ignorance; and its adoption is a proof of the grossest credulity. It has not even the plausibility of witchcraft, and is unsupported by either sound sense or observation.

Many judge of the mildness or severity of the coming winter by the shape of a hog's melt (spleen). If that viscus had been moulded by the weather that had come when the animal was living, it would be odd enough—as odd as if the weather had given a new shape to their own noses; but that heat or cold which has not been felt, and had no existence at the time, should give it form, exceeds all credibility. It reminds me of the auspices of ancient Rome, and deserves no more credit—fit only to be entertained by the worshippers of idols.

N. B. The preceding remarks have no reference to scientific investigations of atmospheric phenomena.

The King Apple is a winter fruit; and was brought to this place from Tompkins county, though I believe it was previously cultivated in some other parts of this county; but I have learned nothing of its origin. It appears to be a good bearer. The following description may assist in identifying it:

Fruit large, or middle sized, roundish or conical, inclining to flat. *Eye* small, closed, in a narrow shallow basin. *Stalk* an inch long, set rather deep in a wide cavity. *Skin* a light yellow on the shaded side, streaked or blotched with red next the sun, and where much exposed, passing into a full red, sparsely marked with brown dots near the stalk, but more thickly dotted near the eye. *Flesh* whitish yellow, subacid but more sweet than that of a fine flavor.

For the New Guinea Farmer.

Comparison of the Devons and the Short Horns.

MR. EDITOR—

In a late number of your valuable paper, "A Subscriber" enquires how the farmer, in view of the conflicting opinions with regard to different breeds of cattle, can arrive at correct conclusions respecting the best breeds, both for the farm and the dairy?

Permit me, having had some experience with the Durhams and Devons, to give my views of the two breeds of cattle. Both are unquestionably excellent kinds of cattle, the rearing of which has been too much neglected.

I should be much influenced in a choice by location. If in the Western part of New York, Ohio, Kentucky, or Tennessee, I should prefer the Short Horned Durhams, for the following reasons:—in a grain growing country, or one well adapted to the culture of roots, the Durhams would be best; for they are a large breed of cattle, and require good keeping, and more time to mature than the common kind; and their size is, I believe, much increased by warm stables or climate and good feeding, for they are generally in the hands of those who take the best care of them.

So far as my experience has taught me, they do not endure the cold weather of middle New York, as well as our common cattle, nor equally fatten on grazing, at two or three years old.

I have not seen them used as working oxen, and cannot, therefore, speak of them in that capacity; as milkers, I consider them good as to quantity, though not above the common cattle, with the same treatment.

But for the New England States, and the northern and middle parts of New York, I should prefer the

Devons; for they are less in size, are finer boned and closer made; will thrive well on less strength of food, are easily kept on hay, mature younger, are very hardy, and prove well for the slaughter at two or three years old. For working oxen I have seen nothing their superior in the New England States; for they are tractable and active, unsurpassed in color, no easy to match and of good size.

With full blood Devon cows I have had but little experience; but the half breeds are excellent in size, shape, and color, and their milk rich, though not large in quantity. I think our common cattle much improved, both as working oxen and as cows, by a cross with the Devons.

Having thus given my opinions, very briefly, upon both kinds of cattle, I would, in conclusion, request any of the subscribers to your valuable paper, also to state their experience respecting the Durhams and Devons. It is only by a mutual interchange of opinions, that truth is elicited and promulgated.

December, 1841.

A SUBSCRIBER.

Editorial Remarks on the above.

We owe an apology to "A Subscriber," for delaying the publication of his article. One reason is that our paper has of late been so bristled with horns, that we feared many readers might be deterred from approach. A better reason is, that his communication is not satisfactory, especially as it was without authority; and we regret that, now we have the authority, we are enjoined to withhold the name.

The question on which he pronounces so confident a judgment is a debatable one, involving some feeling and many interests. We want then facts, not mere opinions. In this case, for example, we want to know how many of the Durhams or Devons he has owned or bred, and how long an experience he has had with them, what was their pedigree, what their ages, what their weight, how they were fed and how managed? We want to know likewise, in regard to the Durham and the Devon cows, or the mixed race, what was their actual product in milk or butter. The pail and the churn are the only tests, which we admit, of the character of a cow.

In some respects, his judgment is entirely opposed to the prevailing opinion. He speaks of the Durhams as coming late to maturity. A point for which their advocates most strongly value them, and we think with apparent reason, is their coming early to maturity.

He says the Devons will thrive well on "less strength of food." The Durhams are larger animals; and size, though not always, yet generally requires a proportionate amount of food. But excepting this, we doubt whether the Devons will do better on hay only than the Short Horns. That the Devons are more hardy must probably be admitted, as high bred animals, such as the best Short Horns, require peculiar attention and care to keep up their condition.

We have seen some admirable oxen of very high blood of the Improved Durham; but we can hardly expect to find any cattle which, as working oxen, surpass the Devon and their crosses. In general, animals of moderate size and snugly built are better working oxen than those which are large and heavy.

As milkers, many of the advocates of the Improved Durhams admit that a cross of the Durham with the Devon is an improvement, as it respects the milking properties of either race. We have seen excellent results from such a cross.

Tomato Figs.—These are certainly a luxury—one which comes within the reach of all, for every man who can put down pork for his family use, can put down a jar of them, and by so doing the utility of *tomato pills*, which now rank so high as a *newspaper medicine*, will be superseded, for in preparing the figs the medical qualities of the fruit are all concentrated. At the South they are already in high repute. And at the North too, as far as they have been tried. W. B.

Hemp.

To the inquiries of T. R. B. in regard to the cultivation of Hemp, we are happy very fully to respond in this number of the Farmer; in a way which, we trust, will be satisfactory to him.

The report of the Commissioner of Patents gives the amount of flax and hemp produced in the United States as amounting to 101,183 tons. But it is a curious circumstance and adopted in some degree to abate our confidence in these tables, that in the returns obtained by the United States census, in the first place the two articles are not distinguished one from the other, so that there is no possibility of determining how much of flax or how much of hemp was raised; and in the next "the amount is sometimes given in tons and sometimes in pounds, so that it is not always easy to discriminate between them;" that is, as we understand it, it is not known whether the figures of the Marshalls mean pounds or tons, which to be sure would make some little difference in the result. Officers employed by the government and paid for obtaining returns who have not knowledge enough or are enough to distinguish between tons and pounds, certainly deserve a vote of thanks from Congress with brass collars for their exactness. The Commissioner says that probably more than half the whole amount must be allotted to flax, as but little hemp, comparatively, is known to be raised. He says again "that some of the amounts should rather have been credited to pounds for flax than to tons, as more nearly corresponding to the actual condition of the crops in our country."

Heads, that "Kentucky probably ranks the highest with respect to the production of hemp. The crop of 1843 was a great failure, and that of the present year suffered from the dry weather. There is not so much attention paid to the culture of this article as its importance demands; yet there is every ground of encouragement for increased enterprise in the production of hemp from the supply required in our own country. The difficulty most in the way of its success, hitherto, has been the neglect either from ignorance, inexperience, or some other cause, properly to prepare it for use by the best process of water-retting. The agriculturists of our country seem, in this respect, to have been so yielded to discouragement. The desiderata of some new and satisfactory results on this subject will be seen from the fact that it is stated the annual consumption of hemp in our navy amounts to nearly two thousand tons; besides which, the demand for the rest of our shipping is not less than about eleven thousand tons more; making an aggregate of nearly fourteen thousand tons—the price of which is paid from \$220 to \$250, and by some even as high as \$280 per ton, together with other and inferior qualities, which are used to supply the deficiency of the better article. Our hemp, it is further stated, on high authority, when properly water-retted, proves, by actual experiment, to be one-third stronger than Russian hemp, to take five feet more run, and to spin twelve pounds more to the four hundred pounds. When so much is felt and said on the increase of our navy prospectively, it is an object worthy of attention to secure, if possible, the production of hemp in our own country, adequate to all our demands. The introduction, too, of gunny bags, and of Scotch and Russian bagging, and iron hoops for cotton, renders this direction of the hemp product more necessary and important. It is hoped that some process of water-retting, which will prove at once both cheap and satisfactory, may yet be discovered."

We subjoin first a letter from John Wilson of Deerfield, Mass., on whose intelligence and experience, so far as it has gone, entire reliance may be placed; and I have great pleasure in adding a letter from Henry Clay, of Kentucky, on the same subject, with which I have been recently honored. Mr. Clay has ever distinguished himself as the devoted and inflexible friend of domestic industry in all its departments; and his own improvements in agriculture and his enlightened zeal and labors for the advancement of this great interest, are not among the least substantial benefits which he has rendered to his country, in a life devoted to her honor and prosperity.

Letter I.—From John Wilson.

Deerfield, Feb. 11, 1842.

MR. COLMAN—

MY ESTEEMED FRIEND—Your letter of the 5th came to hand yesterday: with pleasure I will answer your inquiries in relation to the culture of hemp, so far as I am able. I thought I could find my memorandum on the subject of hemp, by the help of which I should have been able to give you much valuable information on the subject, but I cannot find it. I must therefore, do as well as I can from recollection. Not having expected to have my attention called to the subject again, I have forgotten much that might now be useful, though I should feel a confidence in myself to manage its culture in all its parts, were I to go into the business as I once did. In 1830 I was very largely interested both in raising the crop and purchasing hemp in the stalk by the ton,* for retting and dressing by a machine for market; this then being a new business, we suffered much and learned much, which might be turned to a good account now were I in the business.

I will proceed to answer your questions. 1st, What is the proper soil? Perhaps no soil in the world is better adapted to the growth of hemp than the tillage land in the meadow in front of your house at Meadow Banks, or much of the rich tillage in Deerfield meadows, or on my old farm on the Connecticut. The soil on the Genesee River I should consider well adapted to hemp; in short it wants a warm, deep, rich loam, just suited to the growth of Indian corn. What are the necessary preparation, manure, &c.? That land which has been in Indian corn, potatoes, or any other spring crop the last year, may be prepared for hemp. The land should be well manured with any kind suitable to plough in for corn, (I never saw too much put on) the land should be ploughed and harrowed two or three times, to reduce it to a fine tilth—rolling is very useful to crush the lumps.

The time of sowing, quantity of seed, preparation of seed, drills, hills or broad cast? From 20th of May to 1st of June (here). I suppose your seasons will not vary much from ours. Two bushels to the acre is the usual quantity of seed, and it should be of the last year's growth—try it before sowing, old seed will not vegetate well—very rich land will require more; no preparation of seed required. Sow broadcast, and be sure that the seed is equally distributed over the surface, I have practised sowing a part of the seed one way, and the remainder crosswise. The seed should be covered with a light harrow, and were it not that the hemp pulls harder, I should prefer rolling after sowing.

The after culture, and whether the male plants are gathered before the female plants, &c.? The male plants are not gathered before the female plants for the fibre; both are pulled together soon after the male casts its furrow, before the seed is ripe; the male ripens first; when the male stalk turns yellow and drops it leaves, both are in a fit state to pull. For raising seed a piece should be set apart expressly for that purpose. I practiced sowing in drills: rows about two feet apart, three or four inches between stalks I should think a proper distance; they should be hoed; the male stalks should be taken out after casting the furrow; in this open culture the female plant grows very large and branching; before it begins to cast its seed it should be cut by the ground, and after lying long enough to wilt, should be tied in small bundles and a few set together, open like shocks of corn, to dry; when dry let it be carefully carried to a threshing floor on the ground or to the barn, where, if dry dry, it should be threshed. Fifty bushels of good seed are sometimes produced to the acre; after cleaning the

seed in a winnowing mill, it should be spread in a lot to dry.

The time and mode of harvesting? As before stated, when the stalk of the male hemp begins to turn yellow, after casting its furrow and its leaves principally shed, the hemp is in a proper state to pull; this is done in the same manner as of pulling flax, each hand taking a work wide enough to spread his own hemp on after him; the hemp, after lying a day or two in good weather, should be taken up and bound with straw in small bundles, and set up in small open bunches to dry, the sheaves should be well bound or by often handling they will get loose and open; after the hemp is perfectly dry, it should be either housed or well stacked in the field for retting. Standing out exposed to dews and bad weather, gives the hemp a dark color and is not so good.

How retted and broken and prepared for market? About the 1st of September,* the hemp should be packed down in a pond, and boards or rails put across the handles with sufficient weight on them to keep the hemp under water, here it is to remain till it is sufficiently rotted to separate the fibrous from the ligneous part of the stalk; from 4 to 6 weeks, according to the temperature of the water, will complete the process. To know when it is in a proper state to take from the water, small parcels should be repeatedly taken out, dried and put under a break like flax; when it is found to be in a proper state, the water should be drawn off and the hemp drawn out on sleds and set up against fences or poles, put up on crotches, to dry; here it may stand without injury during the winter, or be dressed out like flax at any time when it can be dried; if it is to be dressed by hand, which I should prefer to any machine that I have seen, it requires a break much coarser than for flax, breaking the woody part of the stalks coarsely, they separate from the fibres in dressing much easier than if broken fine; after breaking and shaking out what shives will come out readily, it is put on to a perpendicular board like flax, but does not require that quick powerful use of the swinging knife as flax; a light slow brush of the knife downward on the hemp, will separate the wood from the fibre better than a quick motion, and with less waste to the hemp; I would premise that the end before swinging should be cleaned by a coarse heckle. After the hemp is cleaned, two or three handful should be put together, twisted a little and laid a length on the floor, and when a bundle or ball of good size is so piled, it is bound firmly together in three places with handfulls of the same hemp or with rope.

The average yield per acre? The expense of cultivation? The value to the grower when prepared for market? How disposed of? Objections to its culture, &c.? The average yield is from 4 to 30 pounds per acre; the expense of cultivation depends on the quantity of manure, number of ploughings and harrowings in the first place. It is a dry's work to pull a quarter of an acre of good hemp. After pulling, the carting and retting will depend very much on the situation of the pond, whether it be near or distant; as to dressing, I believe a man can break and cleanse 50 pounds of good hemp in a day. The price of hemp in market varies like other productions, though good water-retted American hemp I consider equal to good Russian, yet I believe it does not usually sell quite so high—the price ranges from 10 to 15 cents per pound. I should think that in your section of country much of the hemp that might be raised there would find a home market, to be manufactured into cordage for various uses. I know of no objections to its cultivation; it leaves the soil in a fit

*Perhaps this is a little too early, the weather should cool when it is taken out of the water to prevent fermenting.

in state for any following crop; it fills the ground so completely that no weeds of any kind will grow with it. The amount of vegetation taken from the soil will make it an exhausting crop of course, but the quantity of manure previously put on to the ground reduces the crop, will keep it in a productive state the next. I believe I have noticed all your enquiries, but I fear not much to your benefit, at least I could have been glad to have done it more to my satisfaction.

Letter II.—From Henry Clay.

Washington, 4th March, 1842.

DEAR SIR—My engagements of a public nature are such that I cannot answer one letter in 20 I receive, and I must reply very briefly to yours on the mode of cultivating Hemp. I once wrote an essay on the subject, of which I regret that I have copy to send you. It was published in some agricultural periodical published at Cincinnati.

The best soil for Hemp is a rich vegetable mould, a clay substratum, either fresh, or which has long in pasture. Any stable or ordinary manure pad, if it is necessary to use any, which depends in the degree of the fertility of the soil. Hemp needs very little, and I have known it cultivated successive years in the same field without any manure of the crop.

The ground should be prepared exactly as you would make the best preparation for wheat. A bushel and a peck of seed, or, if the land is uncommodious, a bushel and half, to the acre, should be sowed, at least from the first to the 23th of May. All plants, male and female, are gathered, by pulling cutting close to the ground by a cutting knife resembling a reap hook, but shorter. The plants intended to produce seed are sowed by themselves in rows, and cultivated with the plough and hoe, so as to keep them clean.

The Crop Hemp is pulled or cut (for there is not much difference between the two methods, although after cutting) about the 20th or 25th of August; the proper time is indicated by the Hemp leaves being a little yellow, and the farina escaping when stalks are agitated. When cut or pulled, the stalks are suffered to remain on the ground a few days if they are cured, and if a rain falls on them so late the better, as it will render the separation of leaves from the stalk easier. After being cured, hemp is tied up with a hemp stalk in small bundles, convenient to handle, and shocked in the field. The best farmers, in a week or two afterwards, stack them on the field, throwing the tops inside and the outside.

Stacks in November or in December the stalks are beaten, and the Hemp spread down on the field, or in a shed, to ret. The length of time it should remain depends upon whether the season is wet or dry, but it is not less than seven or eight weeks, and may longer. It is spread as you would spread flax regularly, and avoiding its being tangled. You cannot tell whether it is sufficiently retted or not but by turning up a handful and ascertaining if the lint will separate easily. When sufficiently thus retted it is taken up, and again shocked, and broken out, in the month of February, March, April, &c., as convenient, by a large hand brake. I ask my hands \$0 per day, and allow them a cent per lb. for every yard beyond that. I have known, in some instances as much as 250 pounds per day broken out. As a handful is broken out, the spikes, that is the little pieces of the stalk which adhere to the lint, are fully beaten off, so as to make it clean, and the lint is laid away, and at night tied up in a bale or press, and carried to the Hemp house. All attempts to substitute horse, water or steam power to the hand

brake, and there have been many, have hitherto failed.

The above method is what we call dew retting. I have never tried water retting. That is effected by immersing the hemp stalks in bundles, in water, and keeping them under with weights. September is the best period, and standing better than running water. The length of time may be a few days or more, according to the temperature of the water. You judge, as in the other mode, when it is sufficiently retted.

The Hemp intended to produce seed is suffered to remain in the ground until the first light frost, is then cut, and after a few days the seed are threshed out.

I regret that I have not time to enlarge on this subject. I am respectfully

Your obt^d serv't,

H. CLAY.

MR HENRY COLMAN.

CORRESPONDENCE.

Extract of a letter from C. N. Bement, Albany, of the 21st February.

"I forwarded, a few days since, a communication for your paper, detailing some experiments which we have tried, to make good butter in the winter, which I hope may be of some consequence to the dairywomen and interesting to your readers. We are so thoroughly convinced of the utility of the process, not only in the quality but in the quantity of the butter, that we have procured a supply of water pans for our use, with hot water in winter and cold water in summer. We claim nothing new or original in the matter; but if we can induce the farmers to try it, we shall think we have done some good to the cause. I am certain those who try it will thank me for the information. If I can add an unit to the sum of human subsistence and comfort, I shall consider myself well paid for my trouble, (not pleasure) in communicating it. I will not make any rash promises, but you may be troubled with some more results of experiments which I have made, or shall make hereafter, if my life is spared."

We most certainly hope and desire that our friend Bement's life may be spared, for agriculture has not in the country a more ardent friend to its improvement. His zeal, while it is associated with great exactness of observation, must essentially contribute to this good object. We cannot wish, in the terms of the Spanish proverb, that he may live a thousand years, for that would be much longer than many of his friends would like to remain without seeing him; but may he live till all his agricultural experiments are completed, and as much longer as he himself desires.

Extract of a letter from John Caldwell, at Salisbury Mills, Orange Co., N. Y., dated February 25th, 1842.—On the subject of the Manufacture of Silk.

Mr. Caldwell is an intelligent and attached friend to the agricultural interests of the country; is President of the Orange Co. Agricultural Society of that county; and delivered a very sensible speech at their annual meeting, which we should be glad to transfer to our columns in full, if our limits allowed of it.

We have little hopes of the Government's extending its protection to the industry of the country in a form in which we think the interests of the country demand. At present, it might be well enough to leave the introduction of foreign raw silk free; but we think it should not long remain so, but the production of raw silk should be encouraged by a duty, which should amount almost to a prohibition. We believe that the production of raw silk is of much more importance to the agricultural interest than the manufacture of silk; and that under a judicious law of import, the manufacture would soon grow up, and as rapidly as could be desired, when the raw material

came to be produced as abundantly among us as in three years from this time it might be. Under the operation of a liberal bounty, Massachusetts has within a year increased her production of cocoons from less than three thousand lbs. a year, to more than 27,000 lbs.; and this, as is ascertained, without the bounty, at a net profit of more than two dollars per lb. on the silk. These are most encouraging facts, especially to the small farmers and those who feel the want of profitable employment in their own families, and feel how closely connected with domestic comfort and good morals is the encouragement of what is called household industry.

The silk culture is a subject in which we take the deepest interest, and we beg our friends in all parts of the country, to let us hear from them whenever they have facts to communicate.

"As no doubt you take an interest in the raising of silk and its manufacture, I beg to inform you that Mr. George W. Murray has established an extensive factory, propelled by water power, at Paterson, in New Jersey, for the purpose of manufacturing from the raw material, sewing silk; which he enters he may extend to that of weaving. It has been about one year in operation, and its success is equal to his most sanguine expectations. His dyeing establishment is in very superior style, and turns out sewing silk of beautiful and standing colors, put up in half or quarter pound packets. In the present state of preparation he can only send out 50 pounds on a week's notice, put up as may be required, being daily called on to supply the manufacturers who make fringe, coach lace, &c. This is a kind of silk totally different from sewings. He offers to purchase American silk, or to manufacture it into sewings for the proprietor at two dollars per pound for blacks, blues, drabs and light dyes,—for the higher colours, such as scarlets, crimsons, purple and plum colors, three to three and a half dollars per pound. His works will turn out shortly, independent of the coach makers' supply, 260 pounds per week; and a few days since, he received from Connecticut a quantity of American raw silk to be manufactured into sewings, and to be put up in skeins and on spools. Silk for weaving is made in tram and organdie, but it is not possible to succeed in that branch in this country, so long as there is any duty on raw silk; whereas this material is charged with the same duty as the foreign silks of all descriptions, putting, by this policy, the foreign manufacturer on an equal footing, and all the advantages of cheap labor, with the domestic manufacturer. It is to be hoped, however, that this condition of things will be modified under the contemplated regulation of the tariff. For sometime to come, the entire produce of the raw material in the United States would not produce of raw silk, a thousandth part of the demand. As it may be an object to the growers in your parts to get this information through your valuable publication, you can if you think proper, make it public. In this country we hope to have many specimens of the industry of our people exhibited at our next fair in this branch, and I trust in all others that may and must contribute to our welfare, we shall not be found wanting. I did hope that at our Albany meeting there would have been some expression of our feelings favorable to a protective tariff, and was very much disappointed at the apathy on that subject.

Do not impute to me interested motives in writing as I do about a protective tariff, further than it is an interest every citizen should feel for the well being of his country. I am not, nor do I expect to be, concerned in any manufacture whatever."

Nothing is high because it is high in rank; and nothing is low because it is low in life.—*Dickens's Speech at Hartford.*

Good Temper or Elegant Specimens of Broken Crochery.

"We strike the New Genesee Farmer from our exchange list, the editors having forgotten their promise to send their paper to those who, like us, have published their prospectus. There is a trickiness about it a man-a-vire that the agricultural press should be ashamed of."

There's for you! from the BURLINGTON GAZETTE, printed in Burlington New Jersey, and edited below all question by the President of the New Jersey Peace Society. Unfortunate nights as we are! we failed to see his elegant sheet, until some kind young man presented the paragraph to our utter consternation. But we hasten to make amends. We would by no means lose a sheet so replete with the spice of good humor; and since he has seen fit to send us so unceremoniously to the dogs, we do not presume to ask any longer an exchange all-one-side; but beg him to put us down as subscribers, and promise to pay in the first bill of the United States Bank of Pennsylvania, that comes into our possession.

The next is from the BRITISH AMERICAN SCALVATOR, published at Toronto; and this, another steamboat Caroline affair, threatens the peace of the two countries. It is strange that men living under a petticoat government can be so treacherous and belligerent. We shall certainly tell the Queen, when we see her.

"Desirous of doing all that we could to make our paper interesting, we lately applied, through a friend residing at Rochester, to the Proprietors of the Genesee Farmer, which has been so largely and liberally supported by our own farmers, for the privilege of using their cuts when applied to the subjects in our columns. They of course have many which they could, without inconvenience, send us; but we felt disappointed when we were informed our journal was looked upon as a rival, and that consequently we had no reason to expect any favors from such a quarter."

Now why could not our neighbor, when he stated the case, have given the words and not his version of our answer to his application. Had our neighbor been unfortunate, had he been poor, had he been so situated that he could not procure cuts for himself, we certainly should not have cut him. But the well executed engravings of this present number show that there was no such want. Why should he desire to shine in borrowed plumes when his own feathers are so brilliant? We should be glad to learn upon what principle of morals any man is bound to relinquish to his next-door neighbor in the same trade, any honest advantages which perchance he may have from his industry or enterprise or more liberal expenditures, which some advantages his neighbor may have upon the same terms.

We recollect a student in college sending to his neighbor to borrow his bellows. "The very proper answer was, 'come and use them at my fire all day if you please.' This system is carried to perfection in Michigan. There a woman sent a child to her neighbor's with this civil request, "Mamma wants to borrow your baby because her breast is sore." Now we advise our neighbor at Toronto to move at once over the line, and try in Michigan if he cannot find a cure for his broken temper. We mean nothing unkind we assure him.

To other Papers and Editors.—We are happy to exchange our humble sheet as far as lies in our power, with other editors and papers, and must take our chance of sometimes making an advantageous and sometimes a profitless exchange; not profitless, however, for we shall always be gainers by a friendly intercourse. If in any instance our paper fails to go where it is desired, we beg to be notified, as in no case shall such miscarriage or omission be attributable to any intentional neglect.

THE SEASON.—The plough was under full way on Ontonaga Co in one place on the 11th March

Industry and Economy.

Here is a second letter from Zelia, "mixing the useful with the agreeable." She discusses some of the causes of our public embarrassments and troubles like a politician. We fear, however, she does not do her own sex full justice. We admit that many women have brought ruin upon their families by extravagance in dress, furniture, and entertainments; but we believe this has been done in most cases, because they have been kept by their husbands ignorant of their true condition, and the husbands have been disposed to encourage, oftentimes, this extravagance for the sake of the reputation of wealth or for conceding their own bankrupt condition. It must be said likewise, to the credit of the women, that in general no persons behave better than most of them under the reverses of fortune; and their sense of justice is much more seldom impaired or destroyed than that of men. The advice of Zelia cannot, however, be amiss. We should be glad to enlarge upon it, but shall leave it to her skillful pen.

MR. COLMAN—

Encouraged by the favorable notice you gave the few remarks I forwarded to you last month, I send you the following observations on *Female Economy*, a subject in my opinion, not unworthy of attention in these trying times. There is a French proverb which runs thus: "Women can do everything, because they rule those who command everything." I am not, nor would I advise any one else to be, so vain as to believe this to its full extent, but that such and similar ideas have become proverbial, proves that women possess a powerful influence in society; and we may add, in no country does that influence prevail to a greater extent than in our own. As all rational beings are responsible for the influence they possess, to society and to a higher authority, it may be well to consider how we have exercised it; whether to meliorate the condition of society by promoting temperance in all things, industry, and economy, with their natural consequences, virtue, health, happiness and independence; or whether its general tendency has been to embarrass and impoverish, to promote and encourage extravagance, folly and idleness with all their consequences.

These are important considerations for women of every age, class and condition, at all times, but especially now; and there are no means so effectual to bring them before the public as through yours and similar journals, the public advocates of industry and economy. I believe it is generally admitted that the extravagance which characterizes our age, the enormous expenditures of time and money on *mere trifles*, is the predominant cause of those embarrassments that press with such deadly weight on this country at present; nor need the remark be limited to this country. It is applicable to others, but *our own country* must be the first object of our consideration. No particular class is exempt from the charge. All have lived beyond their means, beyond the limits of common sense and prudence, particularly in our republican land, where it should be the aim of all to secure and maintain their personal independence as well as the independence of their country. Indeed these are inseparable. Neither can be maintained without true economy. No person or people who consume more than they produce, can long escape being enslaved some way or other; nor will the millions, who are now trodden down by ill-used power, ever attain to freedom, so long as they waste their scanty means in imitating the extravagance of those whom fortune, fate, or other powers have placed above them. Economy, public and private, must be the watchword of all who aim at true happiness and independence. Legislation, to be beneficial, must be dispensed on these principles; but the certain remedy, without which all else will be of no avail, must be found in the reformed habits of the people. It does not require much sagacity to perceive this.

What I wish particularly to speak of now, is, the women have done much, both by precept and example in bringing our affairs to their present depressed condition. At the advice and solicitation of wives and daughters, how many husbands and fathers have been induced to assume a rank far above their means, to indulge in those fashionable follies and vanities that have brought such wreck and ruin upon the land! How many splendid entertainments have been given, elegant and costly furniture, carriages, dresses, jewels, &c. &c. purchased by those whose real income would not be justice have afforded any of them, merely to gratify female vanity and love of false grandeur! Such having been the case, it now becomes us, one and all, when our airy castles have vanished into thin air, to make amends by an opposite course of conduct. Instead of endeavoring to rival each other in the costliness and splendor of our dress, furniture and finery, we must endeavor to excel in the prudent management of our domestic affairs. We must consult carefully our means before soliciting our fathers' husbands to buy this, that or the other thing.

Living beyond our means is an unlikely method to gain respect or admiration, and a sure one to bring us to poverty and discontent. *Simplicity* is more esteemed by sensible people, those only whose esteem is desirable, than show or gaudiness. Bright and clean furniture, such as comfort and convenience demand, is better evidence of good taste, good judgment, and good housekeeping, than that which is elegant and expensive; a few well cooked dishes are better and more creditable than a *very great variety*, and thus it throughout the whole range of domestic management. We must attend more to the useful and less to the ornamental. We must devote but a very small portion of our time to the making of head-wraps, net work and such like, while other more important duties are neglected. We should spend few of our mornings afternoons riding or walking in search of health, exercise, while the flower garden, with its thousand charms, craves our spare hour, and offers in return health and the purest and sweetest of human enjoyments. In fine, we should remember that we are a accountable beings, accountable for the time, the talent and the influence which God has kindly given us. Our hours and days should not be permitted to pass unprofitably away, while so much embarrassment prevails and the means of living are so scantily enjoyed by many of our fellow beings. Not a day nor hour scarcely pass a, but affords us an opportunity extending a charitable hand, if we could afford it, a why then should we be so foolish, so irrational, as spend so much as we have done on mere baubles, comparatively? I am not desirous of curtailing the pleasures of life, or hoarding up riches for their own sake; but would recommend such true economy as will promote permanent and rational happiness and enable us to do good where the opportunity presents itself. For any other purpose, the acquisition of wealth is scarcely worth a thought.

This subject, I doubt not, will be deemed by so quite inappropriate for the female pen; but I only regret that I cannot bestow more talent on it. It is well deserving of female attention as an elegant poem or a romantic story. It is now time to treat of the alities of life, stern though they be. I hope the subject will find many and able advocates.

Yours, &c.

ZELIA

P. S. I am much gratified to find a "kindred spirit" such as W. B. in your columns. I hope he will continue to ply his talented pen and give us instructions in gardening now when welcome spring is at hand. I hope I may soon have the pleasure of finding many such spirits in your columns. I am sorry that name did not seem to you appropriate, but you know "Rose" by any other name would smell as sweet."

Marks on Seeds and Seedsmen—Sowing Seeds, Causes of Failure, &c.

The production of living plants from small grains seed dropped in the earth, is one of the most wonderful and beautiful operations of Nature. When examined by the light of Science, it is found to be acted by the combined agency of earth, air, moisture, and heat; and to ensure success, it is necessary that these four elements be combined in due but different proportions, according to the nature and habits of the different kinds of seeds. Hence arises the difficulty of causing some kinds to vegetate; and the certainty which gardeners generally feel respecting many of their crops until they see the young plants near. Hence, also, arise most of the complaints which are made to seedsmen, and the censures which are unjustly cast upon them by inexperienced cultivators.

In order to explain this subject, and with a view to banish the evil, the Proprietor of the Rochester Seed Store has annexed the testimony of several highly respectable and successful cultivators in the country, of some accounts of their methods of preparing and sowing several of the most important kinds of seeds that are liable to fail with careless management. The Editor of the Albany Cultivator, speaking of this general subject, says:—

Seeds often fail to grow; and the seedsmen are often faulted, for vending bad seeds, when the cause of their not growing is owing to the gardener or planter. To induce germination, moisture, atmospheric air, and a certain temperature, are indispensable; and it is also requisite that light be excluded from the seed, until the nutriment of the soil is exhausted, or until the root can draw nourishment from the soil. The first effect of the air, heat, and moisture upon the seed is, to change its properties—to convert its starch into sugar—into a sort of milky pulp, the proper food of the embryo unit. At this stage the seed becomes dry, its vitality is believed to be destroyed; but if these elements are permitted to exert their influence, the contents of the seed swell by degrees, and the first unit of the future root having formed, breaks through the shell in a downward direction, and at the same time the first point of the future stem comes forth in an upward direction. The influence of the air, heat, and moisture are as indispensable to the growth of the plant, as they are the germination of the seed.

Now it often happens, that when seeds are planted in fresh stirred ground, or when the soil is moist, they undergo the incipient progress of germination, and the earth not being pressed upon them, and dry weather ensuing, the moisture is absorbed, and the seeds perish. Too much moisture is also often destructive to the vital principle of seeds; and others again are buried too deep to be vivified by solar and atmospheric influence.—The first object in planting, therefore, should be to cover the seed just so far under the surface, and so cover it with earth, as shall barely secure to it a constant supply of moisture. There are many kinds, as of the carrot, parsnip, orchard grass, &c., which if not previously steeped, or the soil well pulverized and pressed upon them, fail to grow for want of moisture. Hence, in sowing orchard grass, is found prudent to spread it upon a floor and sprinkle it with water, before it is sown, and to pass roller over the ground after the seed is sown; and rice, in light garden mould, it is advisable to press with the hoe or spade, the earth upon all the seeds after they are sown.

On Sowing Flower Seeds.

DAVID THOMAS, an experienced and very successful Florist remarks:—*N. G. Far. Vol. 1, p. 56.*

For large seeds like the Bean or the Pea, a large soil is well adapted, as they can force their way to the surface from any moderate depth; but all seeds require different treatment; and we put it down as a safe rule, the finer the seed, the deeper should be the soil.

How does Nature, exemplifying Supreme Wisdom, sow her most delicate seeds? She scatters them on the shady ground, trusting to the rain or the frost to cover them, (of course slightly,) and they germinate before the sun has acquired power

enough to scorch them. The dust-like seeds of the Orchis and Cypripedium sometimes grow in beds of damp moss.

Common garden loam, whether clayey or sandy, is much improved by a dressing of vegetable earth from the woods, well mixed before planting. If prepared in the preceding autumn, and pulverized by the frost, all the better.

Such a soil is favorable to seeds of almost any kind, but *essential* to the finer and more delicate sowing. The preparation of the soil alone, however, is not enough. Fine seeds may be sown in it covered more than from one eighth to half an inch deep; and their short roots may be parched if exposed to the sun except in morning and evening. To a *fine soil*, therefore, we must add the protection of *shade*, and in time of drought, a regular supply of *moisture*. If the seeds are sown in an open border, a sprinkling of water in the evenings is best, but carefully abstain from applying so much as will bake the ground."

On Preparing and Sowing Onion Seed.

W. RICHES—*(N. G. Farner, Vol. 2, Page 38.)* says,

"First, soak the seeds in water from six to twenty-four hours—some seeds being slower to admit moisture than others, is the difference in the time required. After soaking, drain off the water, and mix the seeds with a sufficient quantity of earth to absorb the moisture remaining on the seeds; stir them often that they may vegetate evenly, and keep them in a moderate degree of warmth and moisture until they are sprouted, when they are ready to put into the ground. If the weather should be unfavorable, put the seeds in a cool place, which will check their growth."

It was left in that situation until the time of sowing. In April, as soon as the soil was sufficiently dry, the sowing was commenced, and the second day at night the sowing was finished, with seed prepared as before stated. In one week the onions were up, rows were soon visible, nearly twenty rods, and no weeds yet appeared. The operation of stirring the soil with rakes and hoes was then commenced, and the weeds were not suffered to grow during the summer. (It is a mistaken notion that it is not time to hoe a garden until it is green with weeds.) The first of September the onions were harvested, and the product was over two thousand bushels of fine onions from two and a half acres."

On Sowing Mangel Wurtzel Seed.

J. RUPATERKES, (N. G. Farner, vol. 1, p. 149.)

"I prepared half an acre of land for Mangel Wurtzel, and obtained the seed from your agent at Canandaigua. After soaking the seed one day, I commenced sowing; but rain came on, and the soil being rather clayey, it was a whole week before I could sow the remainder. The seed was soaked all this time, and supposing it was spoiled or injured, I sowed it thicker than usual, and had not enough to finish the ground. Accordingly I sent to the same place and got more seed, and sowed the remainder without any soaking; so that part of my ground was sown with seed soaked one day, another part one week, and a third part not at all."

Now for the result:—The part soaked one week, came up first, and much too thickly—the part soaked one day, came up slowly and very thinly; while the part not soaked, did not come up at all. Thus showing conclusively, the necessity of thoroughly soaking these seeds and the little danger there is to be apprehended from soaking too long. I am confident that inattention to this subject, is the most frequent cause of the failure of the Mangel Wurtzel and Sugar Beet seeds."

WILLIAM GARRETT, (N. G. Far. vol. 1, p. 20) says, "Much complaint is sometimes made of Mangel Wurtzel and Sugar Beet seed failing to grow. These seeds are not quite as sure of vegetation as some kinds; still, if rightly prepared, and sown when the ground is in good condition, before the weather becomes too dry, they will very seldom fail. The seed should be soaked in soft water, standing in a warm place, *for three or four days* before sowing. The shell of the seed is very hard, and requires a long time soaking for it to become softened so that the germ can burst it open. I have sometimes known it fail after being soaked, owing to late sowing and dry weather."

Planting too deeply.—In vol. 1, p. 97, W. R. Smith states that he "planted half an acre of Mangel Wurtzel with two pounds of seed from the Rochester Seed Store. In a few days some scattering plants made their appearance. Well, nearly two weeks after I was surprised to find a fair number of plants just peeping through, and from their weak and thin appearance, evidently wearied

with their journey to the surface, which they never could have reached, if the soil had not been light."

Another correspondent (p. 121) says "I purchased in the spring, at the Rochester Seed Store, a small quantity of mangel wurtzel seed. Some of them I planted myself, and the ground being dry, I put them in about three inches deep, being resolved they should grow. Another portion of them I left for my hired man to plant, who, I ascertained, put them in still deeper. The first came to rather thinly, although abundance of seed was used; and the second scarcely grew at all. As some of my neighbors had been equally unsuccessful, the conclusion necessarily followed that the seeds, if not the vendors, were no better than they should be."

Having some seed still on hand, and a little more vacant ground, after a rain I concluded to plant the remainder; but working rather in despair than in hope, I buried them only an inch deep, dropping them by the line without making any furrow. The result was they came up as thickly as could be expected from the best of seed with the best of culture. I concluded it must be rather a difficult business to pursue, where one's honesty was thus established merely by accident; and that before condemning others, we should be careful that we ourselves had done our part for meriting success."

Parsnip, Carrot, Celery and Parsley Seeds are all slow to vegetate, and, if sown late and dry weather descends, they will not often come up. These seeds should be sown early, in fine soil, rolled or pressed down and kept moist. Mr. Geo. Sheffer of Wheatland, raises large quantities of carrots for feeding. He sows the seed 48 hours, then rolls it in plaster, and when sown covers it from one half to three quarters of an inch deep.—(N. G. Far. vol. 2, p. 181.)

Cucumber, Melon and Squash Seeds, seldom lose their vitality by age or otherwise, but when sown they often fail to grow, owing to the ground being cold or wet. These, and some other seeds, will invariably rot if sown too early—before the ground is sufficiently warm. Lima Beans and Sweet Corn often fail from the same cause.

Egg Plant Seed will not vegetate in the open ground—it requires a good hot bed.

Locust Seed must be thoroughly scalded, by pouring on boiling hot water and letting it soak 24 hours.

The Love of Flowers.

"Who does not love a flower?"

Its hues are taken from the light

Which summer's suns fling pure and bright

In scattered and prismatic hues,

That smile and shine in drooping dews,

Its fragrance from the sweetest air,—

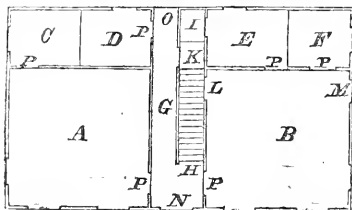
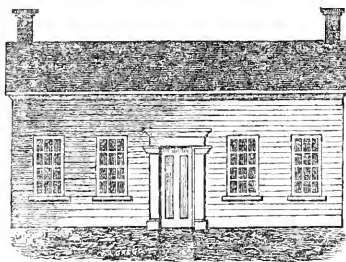
Its form from all that's light and fair,—

Who does not love a flower?"

"Flowers, of all created things, are the most innocent and simple, and most superbly complex—play things for childhood and ornaments for the grave. Flowers, beloved by the wandering idiot; and studied by the deep thinking man of science! Flowers, that of all perishing things are the most perishing; yet, of all earthly things are the most heavenly! Flowers, that unceasingly expand to heaven their grateful, and to man their cheerful looks—promoters of human joy, soothers of human sorrow; fit emblems of the victor's triumphs, of the young bride's blushes—welcome to crowded halls, and graceful upon solitary graves! Flowers are, in the volume of nature, what the expression, "God is love," is in the volume of revelation."

"The taste for flowers, every where increasing among us, is an omen of good. Let us adorn our parlors, doorways, yards and roadides with trees, shrubs, and flowers. How delightful they appear to the passer by. How favorable we think of the person whose yard and garden is decorated with shrubs and flowers. When we view a dwelling, the doors and windows of which are adorned with flowers, we associate the smiles within with all that is neat, gentle, pure, charming, lovely and refined. Saw you ever a coarse, ill bred, awkward family, where a taste for flowers was displayed? We grow not."

A Cheap and Convenient Farm Cottage.



REFERENCES.

- A. Parlour 14 by 14 feet.
- B. Kitchen 14 by 14 feet.
- C. Bed-room off parlour, 9 by 7 feet.
- D. Bed-room off hall, 9 by 7 feet.
- E. Bed-room off kitchen, 9 by 9 feet.
- F. Buttery, 9 by 5 feet.
- G. Hall, 6 feet wide.
- H. Stairs—length, 34 feet.
- I. Clothes room off kitchen bed room.
- K. Clothes room off hall.
- L. Door to cellar stairs.
- M. Door to wood house.
- N. Front door.
- O. Back door.
- P. Inside doors.

*Width 23 feet—height of posts 12 feet.

MR. COLMAN—

A goodly portion of your readers are like myself, yet the tenants of primitive log cabins, of which perhaps, coming as you do from one of the oldest states, you are not aware. We are looking forward to the day, however, which shall see us comfortably settled in snug convenient houses, and as the busy note of preparation is already sounded by some of my brother farmers, I have thought perhaps, that a plan of a cheap and convenient farm house might be acceptable; and if your opinion coincides therewith, you are at liberty to serve it up to your readers. It will be observed from the plan above, that there are no fireplaces in this house. Stoves, both for parlor and kitchen, have now come into such general use among farmers, and cooking stoves are now brought to such perfection, that fire-places have become in a manner unnecessary. The chimneys are built upon the chamber floor, and in preparing the frame work of the floor, the part upon which the chimneys rest should have extra firmness, so that it may not settle with their weight. The stove pipes from the lower rooms pass through the chamber floor, and thence by an elbow into the chimneys. Should a fire-place be wanted in the kitchen, one may be constructed with some additional expense; or, which would be preferable, a small room might be finished in the end of the wood-house, adjoining the kitchen door, with a fire-place and even in it. The cost of this house finished in a plain, neat, substantial manner, built of wood, would be, in the county of Wyoming, N. Y., about \$700.

It is a gratifying fact, and one which every observing traveller will notice, that much improvement has been made the last few years, in the construction of

farm houses; the neat, snug, convenient cottage taking the place of the overgrown meeting house style, which has so generally prevailed. Still great errors are often made by farmers in building, and perhaps not the least, is too great an expenditure upon a dwelling house, while the other buildings of the farm, and indeed the improvement and cultivation of the soil are neglected. An instance came under my observation last summer. In passing through Cayuga county, a splendid brick edifice met my eye in the distance, and the thought struck me, that the owner having brought up his soil to the highest pitch of cultivation, and having his barns and out buildings extensive and convenient, and his fields all secured by ample, permanent and handsome fences, had appropriated six or eight thousand dollars, for the want of other use for the money, upon a dwelling house. But upon arriving in front of the elegant mansion, I was sadly disappointed. Bad taste, disorder, and slovenliness filled up the picture; barns and out houses miserably arranged and dilapidated; crooked and rickety rail fences on the road side in a state of advanced decay; and last though not least, an extensive and thrifty crop of Canada thistles upon either side of the road, promising soon to occupy the ground to the exclusion of every thing else.

In the midst of all, behold the splendid monument of the folly of the man who would allow so many thousands to be swallowed up in that stately pile of brick and mortar, instead of applying it to the improvement and cultivation of his soil; in the latter case yielding him a rich return, in the former, remaining totally dormant and unproductive.

J. HORSEFIELD.

Castile, N. Y., Feb. 1852.

Remarks on the above.

We give above the plan of our correspondent, not that we deem it the best which has been or can be contrived, but because it is certainly well contrived, and embraces many conveniences for the extent of land which it covers. The height of posts should be 11 instead of 12 feet, and thus making the lower story 10 feet, it would give four upright feet in the chamber. We protest against bed rooms not larger than 9 by 7 feet. They are inconvenient and unhealthy; and liable to many objections in case of sickness. A bed room should never be less than 12 by 12 feet. By widening the house and lengthening it a few feet, and by adding to the height, which may be done without increasing the extent of the roof, the house would be rendered much more convenient; and the expense not greatly increased. We would by no means give up the plan of a chimney in the kitchen, which, if necessarily closed in winter for the purpose of using a stove, should by all means be open in summer for the purpose of ventilation, when the cooking stove should be transferred to a shed, or to a temporary out-building, if no other convenient place offered.

We are of opinion, likewise, that one window, perhaps as large as one and a half of those described on the plan, or it may be larger, would be more economical and handsomer than two, as put down. About matters of taste, however, there is no occasion for dispute.

The plan, furnished by our correspondent, we are glad to publish on another account, as all such clever plans, if not exactly what any one wants, suggest valuable hints and arrangements to be worked up by other minds according to their convenience.

A plan of building has recently come under our notice, which promises to be economical, substantial, and comfortable. We will describe it. The window frames and door frames are to be first made. The underpinning or cellar wall is then carried up for the reception of the sills, which are to be laid. Strips of boards, in the rough, of an inch in thickness and about 1 or 5 inches in width, are then laid one on the other, flatwise, and nailed through and through, taking care to break joints and to cross or lap at the corners. In

this way the wall is carried up the desired height to receive the plates, upon which the garret floor and rafters for the roof rests. The boards, which are used in this case, may be of any quality, common hemlock or spruce, which should be sawed accordingly, will answer equally well as the best of pine. The wall being thus carried up, is prepared to receive a coat of lim plaster on the outside, which should be sanded or graded; and on the inside it may be plastered directly upon the wall without lathing, and whitewashed. That the surface may be suitable for the plastering both inside and out, the boards composing the wall should not be laid exactly even, but alternately projecting or receding in a slight degree, by which means the mortar will adhere strongly. Such houses are perfectly secure against vermin in the walls; they are substantial and as strong against the wind as any frame house there are no crevices in the walls to admit the air; and they are soon put up, and built at a small expense. Our remarks in this case apply to wooden houses. C. building with stone and brick we may speak at a more convenient time. We agree with our correspondent entirely as to the folly of wasting a large sum of money in a large and expensive house, before the farm itself is put into the highest and most productive condition. Yet no error is more common. It may be laid down as a well-nigh established truth, that no man knows how to build who has not built.

Winter Buttery.

Every person at all familiar with making butter in winter, is aware of the difficulty attending it. Butter made at this season, is generally deficient in color and flavor, is white, crumbly, and not considered fit for the table. This arises partly from the cows being kept, as they generally are at this season of the year exclusively upon dry food, and partly from not rigidly managing the milk.

In the statements of Mr. Merrifield, who took the 3d premium for butter at the late meeting of the State Agricultural Society, he says—"In winter, or milk stands 12 hours, is then removed to the stove and scalded over a slow fire to near boiling heat; the pans removed to the cellar to cool; the cream only churned; the butter placed in the coolest part of the house, will keep good for any length of time." His butter was much admired for its color and flavor, but he thought the scalding process rather tedious and troublesome.

In the 7th edition of "Moubray on Poultry, &c." I found the following, which struck me favorably, as I was determined to profit by the hints.

"A peculiar process of extracting cream from milk by which a superior richness is produced in the cream has long been known in Devonshire: this produces the dairies of that country, being well known to every one by the name of 'clotted' or 'clouted cream.' There is no peculiarity in the milk from which this fluid is extracted, it has been frequently a matter of surprise that the process has not been adopted in other parts of the kingdom. A four sided vessel is formed of zinc plates, 12 inches long, 8 inches wide, and inches deep, with a false bottom at one half the depth. The only communication with the lower compartment, is by the lip, through which it may be filled emptied. Having first placed at the bottom of the upper compartment a plate of perforated zinc, the cream of which is equal to that of the false bottom, a gale of milk is forced (immediately when drawn from the cow) into it, and must remain there at rest for twelve hours; an equal quantity of boiling water must be poured into the lower compartment through the lip; it is then permitted to stand twelve hours more (that is twenty four hours altogether,) when the cream will be found perfect and of such consistency that the whole may be lifted off by the finger as a thumb. It is, however, more effectually removed

ally raising the perforated plate of zinc from the bottom by the ringed handles, by which means the bottom of the cream is lifted off in a sheet, without mixing any part of it with the milk below. With this apparatus I have instituted a series of experiments, and as a mean of twelve successive ones, I obtained the following results:—4 gallons of milk, heated as above, produced, in twenty-four hours, 43 quarts of clotted cream, which after churning only fifteen minutes, gave 40 oz. of butter—4 gallons of milk heated in the common mode, in earthenware pans, and standing forty-eight hours, produced 41 pints of cream, which, after churning ninety minutes, gave 40 oz. of butter. The increase in the quantity of cream, therefore, is $12\frac{1}{2}$ per cent., and of butter 11 per cent."

From the above hint I caused a pan to be made five inches high and very flaring, and another made five inches high and just large enough to receive the cream pan, and then carefully soldered together at the rim. Two tubes were affixed, one an one inch in diameter, the other quite small, as it is only intended to let off the air when the hot water is introduced on the opposite side through the large tube. The annexed cut will perhaps convey a better idea of the pan. The dotted lines showing the inside pan.

The following are the results of my experiments:

EXPERIMENT 1. Strained 11 lbs. of milk, fresh from the cow, into the pan, and after standing twenty-four hours, put four quarts of boiling water into the outer pan and secured the apertures with corks. After six hours after, the cream was carefully taken being very thick and tough, and of a fine yellowish color. Twelve hours after it was churned with spoon, which occupied seven minutes, and produced 5 oz. of butter.

EXPERIMENT 2. The same quantity of milk was put into the same pan, and after standing twelve hours, four quarts of boiling water were introduced, and suffered to stand twenty-four hours, when it was skimmed and immediately churned, which took eleven minutes to convert into butter—produce 6 oz.

EXPERIMENT 3. The same quantity of milk, fresh from the cow, was put into the pan as before, and suffered to stand twelve hours, four quarts of boiling water were then put into the outer pan, and after standing twelve hours it was carefully skimmed, and twelve hours afterwards was converted into butter in five minutes—produce 7 oz.

We now put the three parcels together, and after being well worked, they weighed, with a common set of steelyards, 1½ lbs., being a fraction less than four quarts of milk to produce one pound of butter; to be remarked, however, that the milk was taken from a two-year old heifer, and the difference in the quantity of the butter when separate, or put together may be accounted for by the difficulty of weighing small a quantity with the steelyards.

EXPERIMENT 4. Strained 11 lbs. of milk, fresh from the cow, into a pan of the same size as above, after standing thirty-six hours, it was carefully skimmed and the same process as before adopted to convert it into butter. After diligently working at it one hour and on half, it "was no go," or in dairy language, it would not "come." We then tried to get it by adding a small quantity of cold water; then of warm water, but it was of no use. It was then left for twelve hours, when it was tried again, and after working at it for half an hour, gave up in disgust; "come" it would not, and so we concluded to let "go"—to the cook.

Two other experiments were tried, on the "high heat" or hot water principle, which resulted about the same as Nos. 2 and 3, except the time consumed

in churning—one being four minutes and the other seven minutes; the difference was caused, probably, by the temperature of the weather.

From the above experiments, I am well satisfied of the utility and advantage of the process, and have no doubt but a great saving may be made and good butter produced, even in the coldest weather. I would suggest an improvement in the pans and a saving in expense; besides considerable trouble in washing and drying the pans. Let the inner pan be made smaller in diameter at the top, so as to strike the other about one inch from the top, and fit tight, so that the steam will not escape—after putting in the hot water set the pan containing the milk into the other. By this means, they being separate, can be washed and dried without difficulty.

Butter is one of the staple productions of our state, and every hint that serves to improve its quality or increase its quantity must be useful. There are various methods of making butter; and there is certainly a vast difference in its quality. One cause of this difference may be in the herbage or food upon which the cows are fed, the breed of the cows, or the season; but most generally in the management. Every one thinks their own method the best, and feel too wise to learn, and sneer at the idea of Philosophy or Science having any sort of connexion in this humble branch of domestic industry.

A writer in a former volume of the N. E. Farmer says, in regard to the color and flavor of butter, "to correct both these evils, take four yellow carrots, of about 1½ inches diameter, to cream enough to make ten pounds of butter, and after washing them, grate and cover them with new milk, and after they have stood ten minutes squeeze them through a cloth into the cream, and the effect has been to make the butter to come quicker, and give it the color and sweetness of May butter. Mrs. B., who sits at my elbow, suggests, as an improvement on the above, to give the carrots to the cows in sufficient quantities, and readily believes that carrots used in that form, will impart a fine color to butter and add even a rich flavor—that substance and not the coloring matter must be required to give much flavor.

C. N. BEMENT.

Three Hills Farm, Feb. 1842.

Remarks on the above.

We are happy to publish the above communication from our friend Bement. We like it the better because it comes from one who knows what good butter is; and is written with a certain lady at his elbow, who sent to Boston the last year a parcel of butter which was among the best seen in that market.

The pans which he describes we have seen in use in one of the best dairies in Berkshire county, where they are much approved. His experiments are valuable, though we should like a little more exactness in weighing. The process of heating the milk, as may be seen by an article in our last from a fair correspondent, is not new; but the best contrivance for scalding it that we have seen is, where a vessel was used, large enough to contain six pans, and about eight inches deep, so that they might be set in three or four inches of water, and this vessel with a copper foot or shoe to it, with which the water communicated, and which was put into the side of a stove over the fire, so that the water in this way might be easily boiled. This vessel had a wooden cover and thus the milk was heated in this water; and as soon as the bubbles rose upon it or the fixed air began to escape, the milk was removed into the dairy room to throw up the cream. This was less trouble, we think, than using the double pans, which Mr. Bement describes.

We have seen as fine and delicious butter made in winter as in summer, but not upon clear hay. There is reason to think that the color of butter depends somewhat upon the cow, somewhat upon the place

where it is kept, and much more upon the feed of the animals. We agree entirely with Mrs. B., with Mr. Bement's leave, that the best mode of coloring the butter with carrots, is to give the cows the carrots and let them mix the dye.

We know that with enough of these and some Indian meal and clover hay, yellow butter and butter of a fine flavor may be made as well in winter as in summer. We shall take up this subject hereafter when we have more room.

Mr. Bement was foiled in one case in attempting to make his butter come where the milk had not been heated. We have now on our table a letter from a subscriber begging us to give her a reason for just such an occurrence. We recollect many such a weary churning in days gone by. We might look wide and say very leniently in the case that it was undoubtedly owing to the temperature in which the milk or cream was placed; but this explains nothing. Here we think chemistry has a real and useful work to perform. But with present information, the only reason we can give why the cream in such case will not come is that of the woman, if it is not an impeachment of the sex to suppose such a case, who would neither be coaxed nor driven. "I want; why? I can't I want." We don't know every thing, though we begin to think we ought to, from some inquiries that have recently been put to us.

House Plants.

Are an article in whose culture, to our shame be it said, we have never had much experience. Yet we do admire them—vastly and sincerely love them and wherever we see their cultivation, we must in spite of ourselves and the little prejudices which sometimes intrude themselves upon our feelings, entertain kind and charitable feelings towards the dwellers. What cheerfulness they present in the gloom of winter, when the world without lies sorrowing under the influence of decay and the elements are heaved in commotion by the rocking storm? Then they lift their bright smiling heads and remind us of summers past, and awaken strong hopes and bright expectations of smiling suns and flowery scenes in summers to come. For so much pleasure as they afford, they require but little attention, and this little time, if not employed in their behalf might be much worse spent. We know of young ladies who spin their full two runs of street yarn every day in investigating the affairs of the neighborhood, merely to furnish the petty wool of scandal, who might be much more agreeably employed with a favorite geranium or rose, (if no new novel was at hand) and less to the annoyance of community. And young men, too, who by this harmless employment a few minutes each day, would render service to the world which ought to be appreciated.

The propagation and culture of house plants is very simple and easy in the process. Though each variety may require a somewhat different soil to succeed well; yet as a general rule, a mixture of pond-mud, sand and common soil, about one third of each, answers a good purpose. We have found mould taken from the woods and from around roots of trees blown down, where the soil is considerably mingled with sand, to be very useful. Some, require almost a pure sand, and in putting out slips this is probably valuable, as it is loose, allowing the feeble roots to strike freely, and lets off the superfluous water which is often injurious and fatal to the young plant.

In selecting slips for putting out, the beauty of the plant will be more effectually secured by taking those of upright growth. Such rise higher and form better heads, while if lateral ones are cho-

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HENRY COLMAN, Editor.

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TERMS.

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For Contents see last page.

EXPLANATION.—Mr. Colman has of necessity been sent during the last half of the past month, for the purpose of closing some business in Massachusetts and removing his family to Rochester. He is expected to return about the 15th inst.

For the New Genesee Farmer.

The Mild Winter and Early Spring.

It has been observed that mild winters have occurred regular distances of 26 years, as follows:—1686, 1712, 1738, 1764, 1790, 1816, and 1842. The mildness of last winter was a subject of constant remark, particularly among the farmers, who observe the peculiarities of the seasons with more interest, perhaps, than any other class of citizens. This led me to compare the monthly temperature of the corresponding months of the last three winters, viz: 1810, 41 and 42.

Dec. 1840, monthly mean, 5.37 degrees.

" 1841, " " 20.66 "

Jan. 1840, " " 19.45 "

" 1841, " " 97.91 "

" 1842, " " 29.41 "

Feb. 1840, " " 32.47 "

" 1841, " " 24.27 "

" 1842, " " 31.03 "

The mean temperature of the winter 1841, 25.85 deg.

" " " " 1842, 30.40 "

The mercury in the Thermometer did not fall to zero last winter; the lowest, Jan. 24, being 5 degrees below zero.

Farmers, I think, will recollect how exceedingly cold the month of March was, 1841,—mercury five degrees below zero, the 17th; ten degrees lower than any time last winter.

March, 1841, monthly mean 28.55 degrees.

" 1842, " " 39.77 "

A difference of about 11 degrees.

It will be observed that March, 1841, was colder than either January or February, 1842.

First ploughing, February 12th.

Spring birds made their appearance much earlier this spring than last. Robins, blue-birds and pigeons, were seen March 3d. Frogs were heard, and the earth-worm came above the surface at this date.

Bugs and flies were seen in the woods February 3d; also, a grasshopper and mosquitoes in the city.

Vegetation is also much earlier than last spring. Violets were in blossom Feb. 5th in the open garden; Lilacs and shrubbery leaving. One soft maple in blossom March 4th, and covered with honey bees, and many in blossom March 24th, also common elm; apricot in blossom, April 10th; peach and cowslip (caltha) 15th; plum, 19th; shepherds-purse, 20th; English cherry, 22d; hard maple, shad bush, (Aronia. Botry-

apium) and strawberry, 23d; currants, 24th.

Last year cherry and peach began to blossom May 21st; thus you observe that they are more than a month earlier this spring; and so of vegetation generally. Wheat and grass look very fine.

April 23d was a very warm day; the mercury in the Thermometer stood at 82 degrees in the shade, and 81 in the sun.

NOTE.—There was but little snow here last winter, but frequent rains, and some very heavy thunder showers; the first Jan. 20th.

The quantity of rain and melted snow during the winter ending Feb. 1842, 5.78 inches; do, 1841, 4.27 inches.

The harbor at the mouth of the Genesee river was clear of ice February 1st, and the 6th the river was very high, from the melting of the snow on the southern hills. Last year it was uncommonly high March 31st.

METEOROLOGICAL OBSERVATIONS.

MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY

L. WETHERELL, APRIL, 1842.

Date.	Thermometer.		Wind.	Weather.		Rain (inches).
	Surface.	In shade.		A. M.	P. M.	
1	22	38	32	35, 16 W. S.W.	fair	fair
2	49	70	62	59, 83 S.W. W.	fair	fair
3	46	46	43	43, N.E. N.E.	rain	rain
4	34	43	44	42, 66 E. E.	rain	rain
5	48	50	44	44, 83 S.W. S.W.	cl'dy	cl'dy
6	33	53	42	44, N.W. S.W.	fair	cl'dy
7	41	44	39	40, 33 N.E. N.E.	rain	rain
8	35	35	34	34, 5 N.E. N.E.	rain	cl'dy
9	34	40	39	38, 16 N. S.	rain	cl'dy
10	33	65	55	52, S. S.W.	fair	cl'dy
11	39	65	50	52, 33 N.W. S.W.	fair	cl'dy
12	39	46	42	42, 83 N.E. N.E.	cl'dy	cl'dy
13	36	48	41	42, 16 S.E. S.E.	cl'dy	rain
14	23	52	40	43, 16 W. W.	fair	fair
15	36	48	40	40, 5 S.W. S.W.	fair	fair
16	31	46	34	37, 16 N. N.	fair	fair
17	32	50	45	43, 66 N.E. N.E.	fair	cl'dy
18	40	46	43	43, 5 E. E.	rain	cl'dy
19	43	46	44	44, 5 E. N.	cl'dy	cl'dy
20	40	60	55	52, 33 N.W. S.W.	fair	fair
21	44	72	65	62, 83 S.W. S.W.	fair	fair
22	59	82	65	63, 5 S.W. W.	fair	fair
23	40	45	40	41, 16 N. N.	fair	fair
24	37	50	48	45, 83 E. N.E.	fair	fair
25	42	57	49	50, 66 N. N.	fair	fair

Mean, for the first half month, 43.63 degrees.
" corresponding half, 1841, 31.90 "

Agricultural Facts, for 1842.

The Monroe County Agricultural Society will hold their annual Cattle Show and Fair at Rochester, on Thursday and Friday, the 13th and 14th of October next. (The list of premiums, by-laws, &c., will be printed and circulated as soon as they can be prepared.)

The Ontario County Agricultural Society have advertised that their Fair and Cattle Show will be held at Canandaigua, Wednesday and Thursday, October 12th and 13th, but it is proposed to alter the time one

day and hold it on Tuesday and Wednesday, 11th and 12th, so as not to interfere with the time of the Monroe Society. (The list of premiums, by laws, &c., have been printed and circulated throughout the county.)

The Livingston County Agricultural Society will hold their next Fair and Cattle Show at Genesee, on Tuesday, the 4th of October. (Premium lists have been circulated.)

The Ontario County and Seneca County Societies have both advertised to hold their Fairs on Tuesday and Wednesday, October 11th and 12th, the same time as the Ontario county. It is greatly to be regretted that there should not be some mutual understanding among the Societies in the vicinity of each other, so that the days of their shows and fairs should not be the same. It would gratify many of the members to visit each others shows. In this way substantial good might be done and much pleasure given; emulation would become more spirited; the pleasant intercourse of farmers would be extended, and useful information imparted and received. This ought to be arranged at the meeting of the State Society by the different delegates. It is not too late now to arrange it by mutual consultation. There is still plenty of time to circulate notices. (We intend in our next to give a full list of the days and places of as many Societies as will send us the requisite information.) As far as it can be done, delegates should be sent from one society to another, to attend the Fairs, and thus strengthen and extend the bonds of good fellowship. "Our interests are one and indivisible."

Cauliflower.

Our success in the culture of Cauliflowers until the last year, has been equal to our desires, and they are not very small when so good an article is sought for, and the failure of '41 we attribute mainly to *worthless and defective seed*, as from the first paper we sowed, only a half a dozen vegetated, and from the second none at all, which gave us rather a limited supply of plants. The seeds of both papers, one of which was labelled at an establishment in Chautauque county, were very shrivelled and imperfect, having the appearance of being gathered prematurely, as we have no doubt they were. Now this is *too bad*. It is a down right outrage upon the public to offer even under hand and seal such seeds in market. The state of public mind and such, with regard to the culture of rare and delicious plants, that if some sort of success does not attend their exertions, their efforts will cease, and our seed establishments will go where the cauliflower seed we bought last year ought to have gone, instead of coming to market—to the bugs.

When good seed is obtained they are raised as easy as cabbages, will flourish on the same kind of soils and require the same culture. They are superior in taste and healthfulness to any of the cabbage family.

W. B.

W. R. Smith of Macedon, Wayne Co., had a plough in full motion by the 4th of March, and one team had, by the 23d, ploughed about fifteen acres

AGRICULTURAL ADDRESS.

We publish with pleasure the following valuable address, delivered February 1st, before the Cayuga County Agricultural Society at Auburn, N. Y., by David Thomas of Aurora. Mr. Thomas is well known to the readers of the New Genesee Farmer as one of its most frequent and instructive correspondents, and for two years a co-editor of this journal. We cannot say we assent to several of the positions taken in this address; first, because several of them relate to matters which are at present obscure and unsettled; and second, because some of them are not confirmed by our own observation and experience. But we do not like the address the less for this reason. We cannot be supposed, because we publish them, to endorse the opinions of our correspondents or of others. This we beg to say, once for all, is never to be assumed or inferred; but we do as little hold ourselves infallible, and are always desirous in all cases "to hear the other side." Mr. Thomas thinks for himself and has a mind of his own. We like him all the better for this. We should be sorry to have every body agree with us; or ourselves to agree with every body else. This would be very dull work; and put an effectual stop to all inquiry, and consequently to all intellectual progress. This would make the waters of life stagnant and putrid. They might be radiant and beautiful on the surface; but all their freshness and spirit would be gone, and who would wish to drink of them. We value books, discourses, sermons, addresses, &c., for two reasons; first, when they convey some useful knowledge or information; second, when by their original and independent thoughts, whether we acquiesce in their truth or not, they set our minds in vigorous operation. But how few are of this character, or any thing more than the stereotyped repetition of matters, which every school boy has by rote. When an independent thinker, therefore, utters his convictions, be they ever so distant from our own, we always listen with pleasure; but when one of your parrots gets up, who never spread his wings nor ever learnt to say anything but what he heard other people say, and looks as grave as an owl, and then shakes his head as though there were some thing in it, and with wonderful parade of learning informs us, for example, "that the light of the moon being reflected is not quite so intense as that of the sun, and that water is a fluid and the tendency of fluids is to run down hill, and so on," we confess we are sorry to say that that whether at home, or, if we must tell all, at church either, we are so overpowered with admiration or something else, that we have great difficulty in keeping awake.

Cayuga Co. Agricultural Society--Address.

Geologists inform us that soils were chiefly derived from the wear and tear—the disintegration and decomposition of solid rocks. In some tracts of country, the soil is nearly identical with the rock that immediately underlays it, or partakes largely of its nature; but such occurrences are rare in this country. So extremely active was the deluge that swept over and rounded our highest hills, that many a square league of stony atrata was entirely buried by materials that drifted from other parts of the country, and which have no resemblance to the rocks they cover.

Favorably for the southern parts of our county, that deluge came from the north, sweeping over a limestone region, and depositing in its course over our barren state, the rich collection it had made. And here let us stop to consider: if that flood had come in an opposite direction, bringing along the unproductive detritus of the mountains, instead of our fertile fields, and flocks and herds, we might have witnessed nothing more inviting than scrub oak plains, and a few wandering deer.

Like other floods, however, its deposits were irregular, as its velocity was increased or retarded—as it whirled into eddies, or rushed onward in its course. Pure clay indeed, can scarcely be found in this formation; but all the varieties of loam, whether clayey, sandy, or gravelly, occur; and some deep beds of both

sand and gravel, are so pure as not to discolor the water into which they are thrown.

Such instances, however, are rare; and the grinding and mixing of so many substances by that deluge, have been eminently beneficial to our farms. No soil is fertile, says Humphrey Davy, "that contains as much as 19 parts out of 20, of any one material or constituent. On the contrary, soils that contain mixtures of many things, are generally very fertile,—provided that clay, lime, and sand, form a large share of the mass. When you see, therefore, old mortar, the sweepings of the smith shop, or leached ashes thrown into the highway, you may safely conclude that the owner is greatly in want of instruction. These are excellent manures, and permanent in their effects."

Perhaps some would ask, why are different things necessary to constitute a fertile soil? Allow me to answer in the language of Dr. Jackson's Geological Report on Rhode Island: "Chemical science arranges all bodies as electro-positive, or electro-negative. The electro-positive are always the alkaline or basic substances, while the acids are always electro-negative when brought in contact with matters of the positive class. If a soil is wholly positive or negative in its nature, it fails to be fertile; and when one power greatly predominates over the other, it is not in its most favored condition. Silica is regarded as an acid, and alumina, lime, magnesia, iron, and the alkalies, are its opposites."

According to this view, the soil may be considered as a vast galvanic battery. "It is rendered nearly certain," says an eminent writer, "that manures act by the salts they contain, acting when brought in contact with the earths in producing galvanic currents," and of course stimulating the plants in their growth. On this subject, however, I give no opinion of my own, because I can comprehend much more clearly, the neutralizing effects of acids and alkalies, and the absorbent power of any soil of the different materials. This point may be dated our practice quite as well as the farmer; and indeed there seems to be nothing discordant between them.

It is not many years since the existence of acid soils was deemed overlooked. The talented editor of the Farmer's Register in Virginia, was the first to point out the error or oversight; and the subject is now better understood. He furnished no evidence in support of the presence of uncombined acid; but the circumstantial evidence was very strong and pointed; and in my judgment he fairly made out his case. Since the publication of his "Essay on Catechu Manures," other writers of great respectability, have either adopted his views, or furnished additional and convincing proofs of their correctness.

The question may occur, why is not an acid soil as fertile as any other? It is more fertile than any other for such plants as the Red Sorrel; but not for the plants which are the chief objects of the farmer's culture. These generally require a neutral soil—that is, one in which lime under some form or other, occurs in considerable quantity.

Although clear, according to Dr. Jackson's classification, is arranged as an alkaline earth, yet as such, it is so feeble that when united with silica or sand alone, the mass becomes acid, and unfit for our usual crops. On such lands, Indian corn assumes a yellow sickly aspect, even when it is not injured by stagnant water. And what is the cure? Apply lime copiously, and then, says an accurate observer, "the corn soon takes immediately a deep, healthy color, and before there is any perceptible difference in size. The crop will produce from fifty to one hundred per cent. more the first year, before its supply of food can have possibly been increased." And why? Because the poison, which has paralyzed it, was destroyed.

It is well known that when magnesia occurs among quick-lime, it is often injurious to the land. Such a mixture is called *hot lime*, from its burning alkaline quality; the magnesia not combining so speedily as lime does, with carbonic acid, which would render it mild. Besides, the lime, having a stronger attraction for that acid, will either be served first, or take the place of the magnesia, till it has got enough.

When the lime has been long in the heap, I have seen spots of earth, where the lime has been three or four years, in which the *crucian larvæ*—as free from vegetation as the floor for two or three years, although the ground had been carefully scraped over when the heap was removed.

Yet such is the stuff to which the south eastern part of Pennsylvania owes much of its fertility. Formerly, when I lent a hand to that process, it was considered that 30 or 40 bushels to the acre were as much as the land could bear without injury. It was found,

however that rich land would bear more than 10 loads; and in process of time they discovered that 10 bushels to the acre might be safely and profitably applied to pastures or meadows. The lime was stacked in large heaps; and then from a cart or wagon on a calm day, it was scattered with a shovel evenly over the grass. It fell among the decaying leaves which in warm weather yield carbonic acid, and it became cold without injuring the crop.

Some years ago, I published an account of this simple method, believing it superior to that of any other country, and you may judge of my surprise to see it stated in a work of high authority, bearing the date of 1840, that magnesian limestone is unfit for the purposes of agriculture!

Lime, however, possesses other properties besides that of neutralizing acids. One of the most remarkable is the power to absorb putrescent manures; and to hold the fertilizing essence till it is wanted by the crop, through every vicissitude of the seasons, and through indefinite periods of time. There it is, locked up; and nothing at common temperatures but the energy of a growing plant, can unlock it."

Lime has heretofore been styled the basis of a good husbandry. It sours up the manure that is not immediately wanted, for future use—a kind of *bank all*. When the supplies from the barn yard are spread and ploughed into a soil that is nearly destitute of lime the growing crop catches a part of its virtue, but a very large part escapes, and very little will be left for the benefit of those that succeed. I had been used to such soils until I removed to my present farm and was in an agreeably surprised to see how much more durable were the effects of stable manure. My fields were limed by the deluge.

Unwholesome vapors and villainous smells, also absorbed by lime; and some places once remarkable for insalubrity, have been changed in their character by liming or marling the fields around them. Nuisances are converted into manures. A striking illustration of this principle is contained in the following account from the Essay on Calcareous Manures.

The carcass of a cow, killed by accident late in the spring was laid on the ground, and covered by about 25 bushels of broken shells mixed with 45 bushels of corn chiefly asleep. After the rains had settled the heap, it was only six inches thick over the highest part of the carcass. The process of putrefaction was so slow, that several weeks passed before it was over, nor was it ever so violent as to throw off any effluvia that the encephalic crust did not intercept in its ascent, so that no offensive smell was ever perceived. October the carcass was heaped up and applied to the cultivation of an acre of wheat; and the effect produced far exceeded that of the encephalic manure, which was applied at the same time on the surrounding land.

The same valuable work contains a caution to the farmer which may save him from dangerous error. "He is not to suppose that calcareous earth can be rich a soil by direct means. It destroys the worst of productiveness, [acidity] and uses to the great advantage the fertilizing powers of other manures, but of itself it gives no fertility to soils, nor furnishes the least food to growing plants." In other words, it is the strong box for the treasure, but not the treasure itself.

Lime also possesses the property of making soils closer and firmer, and clayey soils lighter. It is a mean between two extremes.

I was conversing several years ago, with a farmer from a sandstone district, who expressed some surprise that 40 bushels of wheat could be raised to the acre. "I don't believe," said he, "that our land could be made rich enough to produce such a crop without lodge." I am entirely of the same opinion unless lime be employed. Stable manure is too slow in acting—the stem grows too rapidly—it is succulent and weak. Whether the lime by combining with silica assists in stiffening the stalk, or not, we may be certain at least, that it yields nourishment as the plants need it; and that every part will be healthy and properly developed.

Professor Emmons says in one of his Geological Reports, that the most fertile soil formed artificially by the mixture of different earths, yielded on analysis 37 per cent. of carbonate of lime. As it is known

*The following extract from Liebig's Organic Chemistry is cited as a parallel case:

"An abnormal production of certain component parts of plants, presupposes a power and capability (of a similitude) to which the most powerful chemical action cannot be compared. The best idea of it may be formed by considering that it surpasses the power of the strongest galvanic battery with which we are not able to separate the oxygen from carbonic acid." p. 154.

ever, that time in some soils, soon ceases to be a manure," it is probable that the real quantity of lime even greater than what was indicated by the analysis. I have seen soils of remarkable fertility, that finally contained a very large proportion of lime; and there is no danger of having too much when it is properly applied.

When the soil is low in plants supplied with water? After a shower, the soil may be wet enough for a time; when the sun and wind dry the surface, the moisture rises up from below by capillary attraction, as the water allows rise up through the wick of a candle to supply the deficiency above. It is from this circumstance that our crops over deep beds of sand suffer in dry weather than where the subsoil is hard and impermeable, showing the benefit of deep and thorough ploughing. In either case, however, as the soil begins to fail, and the soil grows drier, its deep parts absorb moisture from the air; and the plants are constantly nourished by this invisible fountain.

But the different constituent parts of the soil, and the different degrees of energy. Of the carbonaceous, siliceous is the weakest, and the aluminous the strongest, while lime holds an intermediate position. One of these, however, would do by itself. We want sand, because no soil consisting entirely of impalpable matters is fertile; and we want it to keep the soil loose, so that the air can enter its pores, and go up the water which it holds as vapor. Without this assistance, stiff clay or aluminous earth would absorb but little moisture from the atmosphere, because cakes, and shuts out the air. Lime is also a valuable auxiliary in rendering the soil more absorbent, independent of its other indispensable qualities.

But the soil, however it may be tempered and conditioned, can never be absorbent in a high degree than culture. Some crops indeed require more of it in quality than others. Thus Indian corn requires more than wheat; and wheat more than the grasses of the meadow. But vegetable and animal matters are more absorbent than the earths; and culture only in properly introduce them into the soil. Even when, therefore, frequent stirring is necessary to keep the ground loose and the pores open, for the free admission of the air and the easy passage of the roots.

Our coats sometimes become spotted with mud. We apply the brush, but the bristles pass over without effecting its removal. What is the reason? The soil which was suspended in the water, forms a glaze on the coat. It is just so with the interior of a soil which has been long unsifted. The clay forms a crust round the inside of all the little cavities, preventing the free circulation of air, and the introduction of fresh vapor. The fertilizing principles are excluded.

The celebrated Tull, observing the extraordinary effects of high culture, concluded that plants fed on yellow earth, and DUHAINE adopted the same notion. Their philosophy was coarse, but their practice was wise. If we were to follow their example, making plenty of fine earth for the plants—not to feed on, but to drink from, our crops might be greatly increased. One of the chief errors of our husbandry is to cultivate too much land, because it is only half done. Half the quantity with double the work on it, and double crops would be found more profitable.

I have long believed, however, that no part of the system required reformation more than our management of manures. Manure has been called the wealth of the farmer. When it is taken out in the spring, it is commonly scattered over the ground in large mounds; the plough comes along and covers them, or, at least, the wheels may be. It is covered, they intercept the ascent of the moisture from the soil, especially in dry seasons. If not covered, they are washing on the ground—of very little value. Indeed some excellent farmers have satisfied themselves that strawy manure is unprofitable for summer crops.

I am far from holding that opinion, however. The error consists in not applying it to the soil in the best manner. In the spring of 1840, I had no ground for field beet, but a small lot where corn had grown for two years in succession. It was unfit for such a crop without manure; and I had only fresh manure from the stable, which has long been considered most unfavorable to the beet. My necessity, however, prevailed against opinion; and I took the responsibility. From each line where the beets were to grow, two furrows were turned so as to leave a wide deep furrow. Into this the manure was thrown from the

wagon, each fork full touching the one just behind it, till the row was completed. It was well covered by turning two furrows together over it, which held it down while the harrow was passing four times in succession, breaking, pulverizing, and mixing it intimately with the soil. Again two furrows were turned together over the row, and the harrow passed twice more in all, six times. By this process the ground was reduced to a fine tilth; and if there were any better beets in the county, I did not see them.

To me, it was a most instructive experiment. I have often seen manure applied to corn fields, but never in any case where it was so completely incorporated with fine earth. Even in the driest part of that season, the ground was always moist and mellow.

I am satisfied that we have been too saving of our harrows. Thirty years ago, there was a method of ploughing in this country called "cut and cover." It was ploughing, not to the shares, but the *hatters*—the furrow slice covering the space where a furrow ought to have been. I am apprehensive that our ideas of ploughing have declined in the same school. When grain is sown, is it not the prevailing opinion that it is sown too deep when the seed is covered? I had a narrow land harrowed sixteen times in one day, and was satisfied that the labor was well applied.

For beets, or corn, or potatoes, what would be the effect of ploughing in a heavy dressing of stable manure, harrowing twice, and repeating the operations of the ploughing and harrowings four times more, adding each time to the depth of the soil? I have not yet performed the experiment, but the nearer I have approached it the finer has been the crop. Thorough culture would seem to require that every little lump should be broken, so that the roots could wander freely in every direction, and that every drop of a summer shower, should be caught and retained for future use. Hard land and thin soils have some resemblance to a dish bottom upwards.

An instrument for pulverizing the soil was invented a few years ago in Virginia, by Thomas B. Gay. It is called the Drag-roller, for it operates just as a roller would that does not turn, but drag. Take a hollow log, six or seven feet long, split it in two, and one half would serve for this instrument. The greater the diameter, the easier it would run; and be less liable to clog by gathering clods before it. Three feet would be better than two, though either would answer. Frame two pieces of sealing iron to it, connecting them in front; and to this fixture the team is to be attached.

Do you believe that clods as big as a man's fist, or as big as his head, are more useful to the crop than stones of the same size? I do not. But if we break them—grind them to dust—and leave them on the land, they would do as much good as other mellow earth of the same bulk. Now in warring against the clods, this instrument is formidable; and most so before they become thoroughly dried. On the same day, therefore, that the plough turns them up, let the drag-roller grind them down; and let me suggest that lumps of barn yard manure would escape not much better.

Stable manure, however, is often saved for the wheat field, and at any time during the summer, either before or after harvest, it is taken out and thrown into heaps, where it lies wasting until seed time. It is then drawn down into large mounds as before mentioned, the plough covering some, while others too big to cover, stick up over the field. If the wheat is harrowed, perhaps some of these pyramids are upset or demolished; but often the harrow serves them as the plough did—gives them a shove and passes on. Now it seems very clear to me that manures applied in this way, is comparatively of little value.

There is another class of farmers who manage things differently. Soon after the warm weather commences in spring, they collect all the manure of the barn yard into large heaps; and work it over, two or three times in the course of the summer, so that the straw may moulder and be more easily mixed with the soil. This advantage—the only one that I can discover, is indeed secured, but at a heavy expense. The best part of the manure passes off to visit their neighbors, or roams at large through the atmosphere, leaving the worst part, though still of some value, for the owners. The praise of industry is theirs, and the reward of working for nothing and finding themselves.

Another set of farmers, more enterprising still, make up all their barn yard manure into compost. This is done by successive layers of manure, rich earth, and lime, together with any refuse stuff, animal or vegetable, that may be at hand—to be turned and mixed several times in the course of the season. Such manure is always valuable; but with a little more knowledge, its value might be much increased.

Let us consider this subject. From a heap of fermenting manure, a vapor continually rises, very different from the exhalation of a pond, as our noses might testify. Perhaps some may think that such thin dust as that would be of no consequence to a plant; but I can assure them it is the best part of the manure. Humphrey Davy filled a three pint vessel with a long neck, from a fermenting heap of stable manure while it was hot, and turned the beak among the roots of some grass. Nothing but vapor left the vessel; yet in less than a week the grass grew with much more luxuriance than the grass in any other part of the garden.*

The value of this vapor is therefore evident; but how shall we save it? In the first place, the fermentation should be very gradual. Make the heap in the shade, or on the north side of a building, and manage it just as you would manage a coal kiln. The more the air is excluded, the slower and better will be the process. Now covering it with earth will have this effect; but vapor will rise even when it ferments slowly, and therefore manure must be free to scatter through the heap, as it is made; but no quicker. In warm weather, should form an outside covering for the whole pile (when manure is not at hand); but it should be carefully prevented from coming in contact with stable manure, or any animal matter. It must not touch them. It spoils them. A layer of earth should be interposed; and then the lime would be highly useful in catching and retaining the fertilizing vapor as it rises.

I believe there is no difference of opinion on this subject among chemists. Humphrey Davy speaks in the plainest language against mixing quick-lime with common dung as injurious; and other eminent men fully accord with the doctrine. On the outside of the heap, however, quick-lime in a few weeks would be carbonated; and after undergoing this change, it might be safely mixed with the compost. A fresh coat may then be applied.

But some farmers may not wish to apply their barn yard manure in the spring, or make it into compost; they may prefer using it after harvest, and yet not have it wasting in the mean time. In that case I would advise that it be thrown inward where it lies thin, just so far that this work conjointly with the work of covering it, shall amount to the least labor. Then cover the whole with straw or earth to protect it from the sun; and cause it to be trodden down by the cattle as far as possible to exclude the air, and prevent fermentation. Some of you may recollect when forking up such matters after harvest, that the straw in spots was bright and unchanged. That was where it was well trodden. All change is attended with loss; but as some change may be expected, strew lime or marl and plaster, gradually over it, to absorb, or arrest the fertilizing vapor.

The effect of plaster (composed of lime and sulphuric acid) has long been a source of wonder; for it was a wonder how one bushel could add more than 20 times its own weight to a crop of clover. Inquiring minds of course have been busy in trying to explain the mystery; but I doubt if all the properties of this manure are understood even at this day. Humphrey Davy was inclined to think that plaster was a necessary part of the woody fibre of some plants, analogous to the bony matter in animal structures. The plant could not do without it, though it wanted but little; and hence so small a quantity had such a powerful effect. "Plants which seem most benefited by its application," says that eminent chemist, "always afford it on analysis."

When this theory was announced some thirty years ago, it was rejected in this country, where the effects of plaster were much better known than in England, and he could have shown that it enters into such plants in any definite proportion, some of the arguments against him might have been refuted. It appears, however, that he never pursued the inquiry with much interest.

Judge Peters of Pennsylvania, had done more than any other person to extend the knowledge of this manure, and to favor its introduction. He had been very diligent and minute in his inquiries; and though not a professed chemist, became satisfied that sulphuric acid was the active ingredient in plaster. He showed from the observations of Beraud, that lands near Catania in Sicily, abounding in volcanic matter, including sulphur, were very fertile; and from an experiment by the same person, that brimstone, pounded, sifted and mixed with ashes, had a surprising

*Davy on Calcareous Manures.
*Davy's Agricultural Chemistry.
*Davy on the Vegetable Power. — *Agricultural Chemistry*. "Sand is incapable of absorbing miasms from the atmosphere, or of retaining any valuable vapor or fluid."
— *Essay on Cultivating Manures*.

*Davy's Agricultural Chemistry.
*A late traveller writing from Italy says of the peasants residing in the neighborhood of Vesuvius—"If their houses are buried, they return, when the lava cools, to build new ones, and cultivate a soil inexhaustibly fertile."

effect on lucerne and clover. Sulphur acid greatly diluted with water, had a similar effect.

As a further confirmation of the effects of sulphur or sulphuric acid, when Chancellor Livingston was travelling in Flanders, he saw the farmers preparing pyrites for manure. The mineral is a combination of sulphur and iron, and when partially burnt is employed in the same manner, and for the same purpose as we use plaster. Dr. Chapman of Pennsylvania, found a similar result from sulphuret of barites.

Last summer, a new work called ORGANIC CHEMISTRY, by Professor Liebig of Germany, was first published in this country; and it has been considered by those best qualified to judge, as constituting a new era in agriculture. It is not my intention, however, to detain you with any of its details, except his explanation of the effects of plaster on growing plants.

Ammonia is an essential part of the food of plants. It abounds in all vegetables, without exception, with the nitrogen that enters into their composition. It is very volatile; but sulphuric acid (dissolved by the plaster) can prevent its flight, and fix it in the soil. This can only be done, however, when the plaster is dissolved. The sulphuric acid then unites with the ammonia, and the carbonic acid of the ammonia unites with the lime.

Such is the purport of Professor Liebig's explanation of this great mystery. If he is correct in ascribing all* the effect of plaster to this new combination, its importance in the economy of our farms, must be evident. All our fields, pastures and meadows, ought to be strewn with it; and in accordance with his suggestion, it ought to be scattered in all our woods, and over all our barn yards. The quantity required is not great; and many experiments may be instituted at a trifling expense.

I ought to say, however, that this theory appears insufficient for explaining all the phenomena, in connection with the use of plaster. Why is its effect on clover so extraordinary, and on what so insignificant? Judge Peters, after using it forty years, and he never found it beneficial on winter grain; and others, after long trials, thought it did little for the natural grasses. All these, however, are powerfully affected by stable manure—by the very ammonia which that manure yields. And what do we observe? Clover of luxuriant growth, and close along side of it, wheat without any indication of benefit received, though both have been plastered alike.

Again—Professor Liebig informs us that every shower of rain, or fall of snow, brings down ammonia to the ground where the plaster ought to arrest it, and the plants that feed on it ought to be more thrifty; but we have much testimony to show that on many fields no trace of such improvement could be discovered. These facts may not be inexplicable; but they appear to me at present, quite sufficient to bring a doubt on.

I am aware that we have statements in regard to the use of plaster, of the most conflicting kinds, so that with some few exceptions what one denies, another affirms; but would this be so if it acts SOLELY in the manner described by Professor Liebig? A simple cause might be expected to produce a uniform effect. For instance: if Hondeette is a simple cause; and as far as I have understood, it operates with uniform effect, whether on clover, wheat or caldages.

On some soils indeed, plaster is uniformly efficient—not the trace of any effect is perceptible. This inertness has been more frequently observed in the tertiary formation near the sea coast; and therefore it was ascribed to the salt vapors. Plaster, however, succeeds well in many places on the coast, and fails in others far beyond the sea breeze, so that the cause seems to reside in the soil, and not in the air.

There are several substances that decompose plaster, besides the carbonate of ammonia. Carbonates of potash and soda have the same power. In the hands of the chemist, plaster and common salt readily change into sulphate of soda, and chloride of lime; and Judge Peters says: "I have seen a bushel of plaster by a handful of salt—it was unfit for either cement or manure." Some of the oxalates also effect its decomposition.

When this happens, the plaster no longer exists; and most of these results are not known to be of much value as manures. Such failures, however, rarely occur on calcareous soils, or on such as contain a due proportion of lime. There plaster generally proves beneficial; and even in England it has succeeded on

such lands. Many years ago, in the south eastern part of Pennsylvania, some farmers thought it would supersede the use of lime; but it gradually lost its effect; regaining it, however, when the land was limed. Wherever plaster proves of no use therefore, TRY LIME. On a small scale, it may be done at a trifling expense; and may lead to the most beneficial results. And remember that plaster must be dissolved before it can do any good. Sometimes there is not rain enough for this purpose in summer, and therefore there is always a risk to sow it late in the spring. Let it be done early.

I have now arrived at my last paragraph. From bogs or deep swamps, manure may be manufactured to a great extent. Three parts of peat and one of stable dung are mixed together and fermented through the summer. It was used in England* many years ago; and has been found in New England, equal to the same bulk of stable manure, and more permanent in its effects.†

For the New Genesee Farmer. Strictures on Mr. Garbutt's Views respecting Roots and Improved Stock.

MR. EDITOR—I was much surprised on perusing Mr. Garbutt's remarks in the January number of the New Genesee Farmer. I did think he would have been the last man that would go against agricultural improvement, and especially root culture and improved stock.

It is admitted by the intelligent cultivators of Great Britain, that the root culture has doubled the products of the soil of that country. There one fourth, and frequently one third, of the arable land is annually sown to turnips or mangel wurtzel, and the advantage of this crop to the cultivators is almost past calculation. The greatest proportion of their beef and mutton is fattened in the winter with these roots, and their stock are wintered on them and straw. Where the farmers of this country to adopt the same improved husbandry, the benefit to them would be equally great. It is true that labor here costs much more than it does there, but that is more than over balanced by the exorbitant rents and heavy taxes which have there to be paid. Were each farmer here to raise 40 or 50 acres of roots annually, (which they could easily do) our country would soon wear a very different aspect. Instead of the poor miserable animals which generally occupy our barnyards in the spring, they would exhibit the fat and thrifty appearance of our stock in October, only much improved in size and beauty, as in England. The greater part of our beef and mutton would be made in winter, and we would not only save our summer's pasture, but our animals would be much better fattened and their flesh of much more value; instead of 2½ cents per pound, it would be worth 8 or 10. There would also be a great saving of ground and labor by wintering the stock with out hay, and the consumption of so many roots in winter would greatly increase the barnyard manure, which is the farmer's gold mine, and thus enable farmers to enrich the soil and double the amount of their grain crop per acre. Such would be the beneficial results of introducing the root culture, and the benefit of introducing the "best and most improved stock" will be of more importance, and if possible of more profit. Let any one look over the sales of these beautiful animals which have been made in this country for four years past, and he must conclude that \$200 per head will be a low calculation for an average price of such animals in future.

I think that the average value of our native cattle which are slaughtered at home or drove to market, will not average over \$25 per head, but say \$30, and what an immense difference in value and profit, is there in favor of the Improved Darhams. And the improved sheep are also well worthy of attention. The 10 or 12 lb. Cotswold fleece is of much more value than the Merino's 3 lb. fleece; and the

35 or 40 lbs. of good mutton per quarter of the former, are certainly of more value than the 10 or 12 of the latter. Were these improvements in husbandry but generally adopted, the products of the soil would be doubled and the wealth of the country increased threefold; and then the hue and cry about hard time and the scarcity of money, would vanish like smoke before the wind.

These facts, Mr. Editor, are self evident to all who are not willfully blind, or stupidly ignorant; therefore persevere in your well doing, extend your valuable paper to every cottage, hamlet, yes, and stately mansion, that all may know what they can do for themselves and their country. And to effect such laudable purposes, I propose that each friend of the New Genesee Farmer pay for three copies annually, to distribute them amongst those of their acquaintances who are not willing to pay for it, and it will soon be in the hands of all.

I remain most sincerely,

A FRIEND OF IMPROVEMENT.

February, 1842.

Corrected Views on Root Crops and Improved Stock.

MR. EDITOR—I am glad to see that you call on your intelligent correspondents to correct my erroneous ideas published in the last number of the Farmer. We are all liable to form wrong conclusions, and frank discussion of them, with liberality and kindness is the only way to arrive at truth; and why should I cultivators of the soil quarrel with each other? We have one general interest, viz., the improvement of the soil, and the increasing of the products of our labor. Petty jealousies or individual strife should never disturb the free interchange of our views.

But, my esteemed friend, I think that you mistook my suggestions. It was far from my intention to insinuate that labor and capital judiciously employed were not rewarded to the American farmer. I think that we, who are lords of the soil, do reap the fruit of our own labor. We are better off than any tenants in the world, independent of the enormous rents and heavy taxes of England.

Nor did I intend to hint that the root crop, to a moderate extent, was not profitable. I know the reverse from experience, and much regret that farmers in general pay so little attention to it.

And I am, also, as warmly in favor as any one, of rearing and maintaining the *most improved* and *best* (but I would rather say most profitable) stock for the country. It was my wish to convey this idea, and I did not do it, you must excuse a ploughman's blunders. There are great differences in countries relative to the profit of certain crops; what suits the one does not always answer for the other, and in introducing any new thing, it is very essential that we should first test its value or advantages on a small scale, so as to prove them thoroughly, before we adopt them as our own. It is yet my notion that there would be no harm in always doing so. This jumping at every new thing as a trout does at a fly, is the bane of agricultural improvements, and prevents us from bringing anything to perfection. They who have the means to give \$10 per bushel for Robin Potatoes, or as many hundreds for a Durham Bull, can do so; but if they should have to pay for the one by raising potatoes at 20 cents per bushel, or the other by beef at 2½ cents per pound, I fear that they will think that they have paid rather too dearly for the whistle, and their ardour for improvement thus receive a severe lamper. That various agricultural productions are better adapted and more profitable to be raised in one country than another, is not denied by any. It would not be very profitable for a Cattaraugus farmer to sow annually 100 acres of winter wheat, nor for us Westerners to stock our dry soils with redtop. If I am

* The evident influence of Gypsum upon the growth of grasses, depends only upon its fixing in the soil, the ammonia of the atmosphere.—Liebig, p. 142.

† Animal manure acts only by the formation of ammonia.—Liebig, p. 134.

* Davy's Agricultural Chemistry.
† Jackson's Geological Report on Rhode Island.

long in stating that England is better adapted to extensive root culture, and that it is more profitable here than it can be here, I hope that I have done no more in saying so, and that it will not prevent any one from trying a few. That the heavy Dutch roots which arrive soon at maturity when supplied with abundance of succulent food and extraordinary care, are better adapted and more profitable for that country, where such food is abundant, labor cheap, and beef high, than in ours, where all are the reverse, is my humble opinion, and I hope that none of my low farmers will be offended at my saying so. I have often wondered and much regretted that these enterprising and wealthy gentlemen, who have not so much money in introducing these fine, heavy roots, have never taken the trouble to ascertain the exact amount of flesh, or *thirty* that they make for food they consume, and let us know for certainty, how much they are preferable to our native stock. Let any one pass through various parts of Western New York in March and April, and see the number of mangled and half starved cattle which are strutting about the naked fields, or shivering by the side of a fence or empty barn, and he will have reason to think that it would not be much profit, to such farmers at least, to have animals that require more food to better care.

If we feed, and breed, our animals so as to improve them, our native stock would soon become good; and if we do not do so, the best breed in the world will soon degenerate.

Yours most respectfully,
W. GARBUTT.

Wheatland, February, 1822.

We must say that we consider the sentiments addressed above by our good friend, with his qualifications, in the main sound and orthodox; and so far as his feeling any diffidence in sending or we in publishing, let him understand once for all, that we are for the fullest and freest discussion. So far from being offended at another man's honest opinions being thus differ from ours, we should just as soon ink of being offended because his eyes are blue and his black; or because the point of his nose does not open to be placed at the same angle of inclination to the right or the left as our own. Away with such gotry, it is only fit for fools and Inquisitions!

On the other hand, while we think our friend Garbutt is likely to err on the side of too much caution, a friend of Improvement," is a little too buoyant in enthusiasm, and his morning sky is colored mediocrity beyond nature. In their present condition we cannot think of putting two such animals in the same yoke side by side; but with friend Garbutt in the files and a "friend of improvement" forward, we may go along safely and successfully, though in each case there must of necessity be considerable rubbing of sides and of launches, and a great loss of power.

Now with all due respect for our friend Garbutt, we cannot see the advantage or necessity of beginning with the alphabet when we have already learnt to read, nor with a "friend of improvement," that because we have learnt to read, therefore, we know everything, and there is no longer any occasion for books. There is always some danger in going between opposing parties of getting hustled ourselves, but we shall, if we can, get through, no matter if our coat is torn.

The value of raising vegetables for stock and in large quantities is well established in England. Why cannot we avail ourselves of their experience in a question which they have settled; and let stock raising farmers, and wheat growing farmers too, make, as George Shaffer has done, the growing of roots for

stock an indispensable branch of husbandry? The extent to which we pursue it must be settled by a sound discretion, having reference to our wants and to our means, and to the whole of our condition. But the question of their utility, in respect to keeping our stock and the means of enriching our farms, is no longer an open question here any more than in England.

Then again in regard to the introduction of the improved breeds of cattle among us. In England the most extraordinary pains have been taken for more than half a century, the highest skill exerted and the most lavish expenditures incurred in improving their breeds of cattle; and through the liberality or the commercial enterprise, or, if you please, the avarice of many individuals, public spirited or otherwise, we have the advantages of these improvements placed directly within our reach. Now why should we not avail ourselves of them, either by judicious crossing with the best of our breeds, or by adopting the pure stock and making for them such provision as is demanded, in order to maintain their superiority? Such exertions would very much benefit our husbandry and undoubtedly give us an ample profit. At the same time the expectations held out by "a friend of improvement," that 200 dollars per head for our cattle will in such case be a *true* calculation, and instead of getting 2½ cents per pound for our mutton we shall be sure of 8 or 10 cents, is not a calculation that we should think safe to encourage, certainly not in the present dilapidated and fluctuating condition of our currency, when no man can tell for his life, what a dollar is worth. Prices are of all matters in political economy, the most difficult subject of calculation, combining, as they necessarily must, in order to any safe reckoning, so many various elements, such as the condition of the currency, the supply of the article, and the demands of the market. With these brief hints, we submit the case between the parties to the court.—[Editor.

Madder.

Our respected correspondent, L. A. L., who desired some information from us on the culture of madder, we are compelled to refer to the subjoined notice which appeared in the *Genesee Farmer* in 1837, vol. 7, no. 39., which perhaps will be as full as he desires; if not, let him do us the favor to say in what particulars he desires further information, and we will meet his wishes. We have delayed replying to his inquiry, because we hoped we should find some individual personally acquainted with its cultivation and management. That has not been our good fortune, and we have never seen the plant growing. We should infer from the statements given, that the crop might be cultivated to much advantage, if we have only patience enough to wait for the harvest; but as to present prices of the article we know very little, and what price it is likely to bear here hence, who is gifted with the power of divining?

"Madder, or *Rubia tinctorum*, is one of a large family of plants, and for its valuable qualities in coloring has become an important article of cultivation in several countries, particularly Holland, where the province of Friesland is almost wholly devoted to its production. In Radcliff's *Flemish Husbandry*, the following condensed rules are given for its culture: The soil a rich sandy loam of from two to three feet in depth, as the roots must have room to penetrate;—the land laid up in ridges in autumn if to be planted in the spring, and left bare till the middle of March, or in April, on ridges if the ground is wet, if not, on a level, in rows 18 inches apart, and the plants 12 inches distant in the rows;—as much root as practicable should be taken with the slips to be planted, and from six to eight bushels will be required for an acre, though this of course must depend mainly on the distance adopted by the planter;—plant nothing in the intervals, but as the tops shoot up bend them occasionally to the ground and partially cover with earth;—when the tops fall off in autumn, earth the rows as a protection against frost, and in the spring hoe the intervals thoroughly;—the slips of the second year are the best to plant, and should be taken off in the spring when about an inch above the surface;—three years are required for the roots to arrive at perfection, when

they are dug by deep trenching, the roots quickly and carefully dried to prevent discoloration or molding, and then ground and packed for use.

Madder roots are long and creeping, about as large as a quill, red within and without, and a single plant will, in a good soil, yield about 40 pounds of fresh roots, which will in drying be reduced about six sevenths. Some have dug the roots in two years, but the roots do not then contain the proper quantity of coloring matter; and if they stand longer than three years more is lost than is gained after that period. All parts of the root contain some coloring matter, but it is in the middle part that the most and the best is found, the mucroscous showing in this part a multitude of shining red particles, constituting the rich dyeing material, thickly dispersed among the fibres. "According to experiments made in England, five pounds of fresh root goes as far as four of the dry one; and it is estimated that seven or eight pounds of fresh roots are reduced to one in drying; hence the great advantage of using green roots where practicable, becomes apparent. They are more extensively used in a fresh state in France than in any other country, and are the recalled *alfazari*." Good madder when ground for the market is of an orange yellow, passing into a brown red, having an acid sweetish taste and a strong smell.

Some improvements in the culture have been made since it was first attempted here, and if the mode of product per acre may be considered as a criterion, our methods have the advantage over those practiced in Europe. Mr. Woodberry of West Winfield, Herkimer Co., in a letter to the Cultivator, says,—"It is now ascertained that the best method of planting madder, is in beds six feet wide, with four rows of plants to a bed, leaving a space between the beds nine feet wide unoccupied; or it may be planted with rows of corn or potatoes the first season. This space is useful for various purposes, as passing with a team to early manner, should it be considered necessary the first and second seasons. The manure should be dropped between the beds, and mixed with a plough before it is used on the beds." By treating the intervals in this way, Mr. Bronson, a cultivator of madder in the same vicinity, on a few acres of land planted with madder, raised upwards of one thousand bushels of potatoes; and handsome crops of corn have been obtained in the same way. The advantage of planting in beds, arises from the greater extent to which the tops may be covered, as each earthing, properly performed, adds materially to the quantity of the roots produced, the top itself to that extent being converted into root, and not to be distinguished in its qualities from them.

The following estimate prepared by Mr. Woodberry, and it does not very materially differ from those furnished by other cultivators, shows at a single glance the expense of cultivation, and the value of the article produced when ready for market.

Seed per acre 8 bush. at \$4.....	\$32.00
Interest on land 4 years at \$100 per acre.....	11.20
Ploughing and harrowing.....	2.50
Dressing first year.....	25.00
" second year.....	7.00
" third year.....	3.00
Digging.....	21.00
Drying, 25 cents per cwt.....	12.50
Grinding do do.....	12.50
Total expense.....	\$111.70

Product if well cultivated, 5000 pounds, average price 20 cts. per pound.....\$1000.00
Deduct.....111.70

Clear profit.....\$888.30

We have heard but one serious objection made to the culture of madder, and that is, the long time required for its cultivation allows great fluctuations to take place in the price; and these which may arise at the time of commencing with the crop, cannot be relied on as those which will prevail when the article is ready for market. When we remember, however, that the demand is steady, and increasing; that the quantity produced is not likely to vary suddenly; and that for a number of years the price has ranged between 17 to 25 cts. for good qualities, we think little apprehension need be entertained of an overstocked market, or heavy sales. Seed at the proper seasons, may, we believe, be obtained of the growers in the region we have mentioned, as well as mills for grinding the roots, and we should be pleased to learn that farmers suitably located, had added to their other sources of profit, that of the culture of madder."

SCIENTIFIC AGRICULTURE.—Letter 24.

Before quitting the subject of Carbon, it is proper to advert to the experiment which is now frequently tried, and which I have recently seen here.

A Hyacinth bulb was placed, early last November, in a tall glass jar with about three inches of good rich earth, and plentifully watered, the mouth of the jar was then closed as well as possible with cork and sealing wax, and this was done so effectually that the moisture did not evaporate; consequently but little if any air could enter, and the original air within the jar, therefore, remained unchanged by admixture with the fresh external air. The Hyacinth grew vigorously, and in the month of February flowered luxuriantly. Now it is clear that the carbon necessary to form four or five large leaves and a full grown spike of flowers could not have been derived from the small quantity of carbonic acid gas contained in the air in the jar, nor even from the bulb alone; hence a large portion must have been obtained from the humus of the mould—the carbon of which, combining partly with the oxygen of the air, but chiefly with the oxygen of the water, formed carbonic acid gas for the use of the plant. This confirms the opinion of Liebig, who states that the principal use of Humus is by its combination with oxygen, to provide an atmosphere of carbonic acid gas for vegetables to convert into carbon during their growth. Although the trial with a bulbous root, which in the bulb contains already considerable provision of material for growth, is not so fair an experiment as it would be with a plant wanting a bulb. Yet I know from experience, that a hyacinth does not contain near sufficient in its bulb to bring its flowers to perfection without any other aid.

The practical value of these considerations on the subject of Carbon is, that Humus being a considerable means of supplying carbonic acid gas to plants, it must be exposed in sufficient quantity to the action of air and water to generate this gas. This is done by cultivation, in other words, by stirring the soil, keeping it in fine tilth, and thus continually exposing to air and water fresh portions of it—for this purpose also, the admixture of a moderate quantity of stones of proper size is useful, they keep the earth more free and open, and increase the surface of the soil where they are in contact with it, so that more humus is exposed and kept in admixture with moisture.

Azote.—It seems to be well ascertained that, whatever quantity of nourishment be offered to a plant and taken up by it, this nourishment cannot be digested, (assimilated as it more properly termed in vegetable life,) unless it be accompanied with a certain proportion of Azote—in other words the plant cannot convert its food into luxuriant growth without the aid of this substance. It follows then, that however rich the soil may be in other nutrient, if azote in abundance be not supplied, this surplus of undigested food taken up by plants will be again thrown off by them in the shape of gum, honey dew, or other excrements, with every indication of disease. This operation has a perfect parallel in animal existences; a certain quantity of azote is necessary for the digestion of their food. As upon the views taken of this substance, azote, depend results of the utmost importance to agriculture; its nature and properties cannot be too well understood, its application and effects cannot receive too much attentive consideration. I may, therefore, at the outset, be permitted to enter into a few scientific details which shall be as brief and as clear as I can make them.

Payen, a French Chemist of high repute, who has devoted much time and study to these enquiries, has shown that azote is requisite in the formation of a substance in plants analogous to fibrin in animals; that this azotated substance is the origin of all the parts of plants, is always present with, and accompanies all their

organs. Azote is therefore, necessary to produce, with other materials, this concrete fibrous substance, as the rudiment of all vegetation. Azote also serves to produce the liquid albumen which all coagulable juices of plants contain, and a substance called caseum, which has often been confounded with this albumen.

Fibrin, Albumen, and Caseum, therefore, exist in plants, and these three azotated substances offer a remarkable similarity in properties with the three non-azotated substances mentioned under the consideration of Carbon—thus,

Fibrin, like woody fibre, is insoluble;

Albumen, like starch, coagulates by heat;

Caseum, like dextrine, is soluble.

A more profound analogy also exists in the simplicity of the combination of their elements, thus, 18 molecules of carbon, 6 molecules of ammonium, and 17 molecules of water, constitute or may constitute by a different arrangement of these molecules, either fibrin, albumen, or caseum; and thus in both cases carbon and water, or ammonium (containing azote) and water, are the only ingredients necessary for the composition of the substances on which we are now treating, and the production of these ingredients is constantly renewed by the circle of reactions of the animal and the vegetable existences as stated in my last letter.

Now it is of much importance to observe closely and separate distinctly in the mind, two operations of nature in the growth of a vegetable, because it will be seen that ample provision must be made for each of these operations. These two important periods are, first, the growth and increase of all parts of a plant, that is stem, leaves &c., until the flowers and fruit appear in their earliest stages, and fecundation and ripening begin; the growth and increase of the first period is then gradually arrested, and a new or the second operation commences. It may, I think, be conclusively shown, that if we were to continue during the summer and the early autumn constantly to apply fresh stimulus in the shape of manure and moisture to a plant, take for instance one of annual duration, we should obtain an immense growth of leaf and stalk, but the fruit would amount to nothing—on the other hand, if we abstain from applying moisture and stimulants to a plant half grown, we should obtain premature but worthless fruit. This fact is well known to gardeners who, by confining the roots in small pots and depriving them of stimulants, force their plants into premature bloom—or it may be observed on hot and poor spots of land, where the same causes are in natural operation. It is, I believe, sufficiently apparent that proper soil with a sufficient supply of carbon and azote, or in plain terms, well manured land, and plenty of water, are the indispensable requisites for the first operation, and equally so, that sunlight and heat are the necessary conditions for the second operation. If the manure on a hill of corn be examined when the fruit is formed, it will be found pretty well exhausted of its powers—they are no longer absolutely requisite, they have played their part, the chief necessities now are sunlight and heat, with a degree of moisture in the atmosphere sufficient to keep the outer coverings or integuments, and particularly those of the seed and seed vessel, in a soft and yielding state, until they become well filled with the materials which this light and heat is converting in other words ripening, from the saccharine and other juices prepared in its first stage of growth.

The phenomena attending this second period are extremely curious. During the first period the vegetable manufactures and stores up an ample supply of saccharine and other juices, containing chiefly carbon and hydrogen, now when a bud is to open, a flower to be fecundated and fruit perfected, heat is required, and is produced precisely by the same method as in animal life, by the consumption, or rather by the combustion

as it ought to be termed, heat being produced, of the carbon and hydrogen in these saccharine juices. The bud root, for instance, previous to flowering, contains a large quantity of saccharine juice, after flowering however, this has all disappeared. If barley or wheat are made to germinate, heat carbonic acid and water are produced, the starch which these grains contain; converted, first, into gum, then into sugar, and the carbon and hydrogen which this contains, are changed by combustion into carbonic acid. Fecundation is a ways accompanied by heat, flowers respire carbonic acid, they therefore consume carbon; this carbon, the sugar cane, for instance, must arise from the sugar accumulated in the stalk, which sugar disappears when flowering and fructification are accomplished. Thus at certain periods in certain organs, a plant, like a animal, becomes an apparatus of combustion—carbon and hydrogen are burnt in it and heat is given out. This view of these phenomena, will sufficiently account for the differences of opinion amongst many of the early observers of vegetable physiology, on the subject of plants respiring carbonic acid, oxygen, &c.

In my next letter, I will endeavor to give some account of the means, both by the common and by artificial manures, of supplying that absolutely necessary substance, azote—and if I am fortunate enough to obtain any insight into the new artificial manure which has produced the effect on wheat I mentioned in a late letter to you and which is now being manufactured for sale in England, I will communicate the information. I suspect, however, that the same manure was under process of manufacture here last year and I am now awaiting the trial of its efficacy. J. E. T.

Indian Corn and Wheat Alternately.
MR. COLEMAN—

I do not send you a description of the manner in which I have raised my corn for a few years past, because I think my crops have been over large, but rather from their uniformity in yield, which is a desirable object for every farmer in all his crops.

For the last five years I have alternated corn and wheat, drawing from my barn-yard in the spring, from thirty-five to forty wagon loads of long manure to the acre, putting it upon wheat stubble, spreading it evenly, and ploughing it under at least eight inches deep then harrowing lengthwise of the furrows, and marking rows three feet apart each way, planting six to eight quarts of seed (Dutton) to the acre, from the 5th to the 20th of May, according to the season. When up, I leave but four stalks in a hill. I tilled with a cultivator, and hoed twice during the summer without hilling, and harvest by cutting up at the ground from the first to the tenth of September, and draw it off and set it up to cure.

The land is then ploughed once and sowed to wheat; one and a half bushels of seed to the acre, and well harrowed in. From the above management, my corn has yielded for the five years, at least sixty bushels to the acre, as ascertained by accurate measure; besides giving about two tons of stalks to the acre, which I calculate to be worth at least three fourths as much as hay.

My soil is a gravelly loam, dry and warm; subsoil differing very little from the surface, except a little more tenacious. One advantage in planting corn on wheat stubble is, that it is not as liable to be injured by worms as when planted on sward land. My wheat that I have sowed after corn, has yielded from twenty to twenty-five bushels to the acre, except the past season, which was quite a failure, owing to the badness of the season.

Genesee Co. March, 1842.

M. N.

Editorial Remarks.—Emulation in Agriculture. We call the above good husbandry. Sixty bushels of Indian corn and twenty-five bushels of wheat are certainly very good crops, but they are only half enough

animal, the kind, quantity and cost of food, to entitle them to the premiums.

TO BREEDERS.

To the breeder of the best Bull, class I, . . . \$10
To the breeder of the best cow, class I, . . . 10
To the breeder of the best Heifer in class I, . . . 10

ON HORSES—Over 4 years old.

For the best Stallion, . . . \$20 For the best breeding mare & colt, . . . 20
For the second best, . . . 12 For the second best, . . . 12
For the third best, . . . 5 For the third best, . . . 5
For the fourth best, . . . 3 For the fourth best, . . . 3
For the best pair of matched Horses, \$15.
For the second best, . . . \$10 For the third best, . . . \$5

Three years old. *Stalls and Mares*
For the best Stallion, . . . \$10 For the best Mare, . . . \$10
For the second best, . . . 5 For the second best, . . . 5
For the third best, . . . 3 For the third best, . . . 3

A variety of horses possessing size, strength, and endurance for field labor, combined with that action which qualifies for the carriage or saddle—in short the horse of *all work*, is probably the most profitable class which our farmers can now engage in rearing, and to such, therefore, will the preference of the Society be given.

SWINE—Over 10 months old.

For the best Boar, . . . \$10 For the best breeding sow, \$10
For the second best, . . . 5 For the second best, . . . 5
For the third best, . . . 3 For the third best, . . . 3
For the fourth best, . . . 1 For the fourth best, . . . 1

In awarding premiums on hogs, reference will not be had exclusively to size or to present condition, but to that form and that proportion of bone and offal to make valuable parts, which promises the greatest value from the least amount of feed.

SHEEP—I. LONG WOOLLED.

For the best Bock, . . . \$10 For the best of 3 Ewes, \$10
For the second best, . . . 5 For the second best, . . . 5
For the third best, . . . 3 For the third best, . . . 3
For the fourth best, . . . 1 For the fourth best, . . . 1

II. MIDDLE WOOLLED.

For the best Bock, . . . \$10 For the best of 3 Ewes, \$10
For the second best, . . . 5 For the second best, . . . 5
For the third best, . . . 3 For the third best, . . . 3
For the fourth best, . . . 1 For the fourth best, . . . 1

III. FINE WOOLLED.

For the best Bock, . . . \$10 For the best of 3 Ewes, \$10
For the second best, . . . 5 For the second best, . . . 5
For the third best, . . . 3 For the third best, . . . 3
For the fourth best, . . . 1 For the fourth best, . . . 1

The term "Long woolled" is given good to include the Leicester, Lincoln, Cotswolds, and all the English varieties of sheep which furnish the quality of wool suitable for combing—the "middle woolled," the South Down, Norfolk, Dorset, Cheviot, native, &c.—the "fine woolled," the Spanish and Saxons varieties of the Merino and some of their crosses.

FAIRM IMPLEMENTS.

For the best Plow, . . . \$30 For the best Threshing Machine, \$20
For the second best, . . . 20 For the second best, . . . 10
For the third best, . . . 10 For the third best, . . . 5
For the fourth best, . . . 5 For the fourth best, . . . 3
For the best Harrow, . . . 5 For the second best, . . . 3
For the third best, . . . 3 For the third best, . . . 1
For the fourth best, . . . 1 For the fourth best, . . . 1
For the best Cultivator, . . . 5 For the second best, . . . 3
For the third best, . . . 3 For the third best, . . . 1
For the fourth best, . . . 1 For the fourth best, . . . 1
For the best Drill Barrow, . . . 5 For the second best, . . . 3
For the third best, . . . 3 For the third best, . . . 1
For the fourth best, . . . 1 For the fourth best, . . . 1

ON SILK.

Best half bushel Cocoons, \$15 For the third best, . . . \$3
For the second best, . . . 10 For the fourth best, . . . 10
For the third best, . . . 5 For the fourth best, . . . 5
For the fourth best, . . . 3 For the fourth best, . . . 3
Best pound of Reeled Silk, \$15
For the second best, . . . 10 For the third best, . . . 5
For the fourth best, . . . 3 For the fourth best, . . . 3

SILK REEL.

For the best, . . . \$10 For the second best, . . . 5

BUTTER AND CHEESE.

For the best sample of }
Butter, not less than } \$20 Cheese, not less than } \$20
80 pounds, . . . } 100 pounds, . . . }
For the second best, . . . 12 For the second best, . . . 12
For the third best, . . . 5 For the third best, . . . 5
For the fourth best, . . . 3 For the fourth best, . . . 3
The fifth best, . . . 1 The fifth best, . . . 1

The butter offered for premiums may be presented in butter tubs, jars or firkins.

The claimant for premiums on butter, must state in writing the time when it was made; the number of cows kept on his farm; his mode of keeping; the treatment of milk cream and milk before churning; the mode of churning, whisking and salting; the method of freeing the butter from the milk; the quantity and kind of salt used; whether salt-petre or any other

substances have been employed; the best time for churning and keeping butter in hot weather; and the best mode of preserving it and through the summer and winter, and in what vessels.

Those who present cheese for the premiums offered, must state in writing the time when it was made; the number of cows kept; whether the cheese is made from one, two or more milkings; whether any addition is made of cream; the quantity and kind of salt used; the quantity of rennet used and the mode of preparing it; the mode of pressure and the treatment of the cheese afterwards.

FIELD CROPS.

Best crop of Wheat, not less than one acre, . . . \$15
The second best, . . . 10
The third best, . . . 5
The fourth best, . . . 3
For the best crop of Barley, not less than one acre, \$10
The second best, . . . 5
The third best, . . . 3
The fourth best, . . . 1
For the best crop of Oats, not less than one acre, \$10
The second best, . . . 5
The third best, . . . 3
The fourth best, . . . 1
For the best crop of Rye, not less than one acre, \$10
The second best, . . . 5
The third best, . . . 3
The fourth best, . . . 1
For the best crop of Potatoes, not less than one acre, \$10
The second best, . . . 5
The third best, . . . 3
The fourth best, . . . 1
For the best crop of Turnips, not less than one acre, \$10
The second best, . . . 5
The third best, . . . 3
The fourth best, . . . 1

Those who present claims to premiums for farm crops must state in writing the following particulars: The condition of the soil at the commencement of cultivation for the crop; the previous cultivation, product and manure used upon it; the quantity and of manure the present season; the quantity and cost of seed used; the time and manner of sowing, cleaning, and harvesting the crop; the amount of the crop determined by actual measurement; and the expense of cultivation. The land shall be measured by some sworn surveyor, and the claimant of the premium, with two other persons who assisted in measuring, shall certify under oath as to the quantity produced from the piece of land mentioned in the certificate of the surveyor.

MAPLE SUGAR—50 lbs.

The best specimen, . . . \$10 The third best, . . . 5
The second best, . . . 10 The fourth best, . . . 3
Applicants for the premiums on maple sugar will be required to furnish a statement of the manner of making and clarifying the sugar.

DISCRETIONARY PREMIUMS

will be awarded for such implements and products, not enumerated above, as shall be deemed worthy of notice and encouragement.

HORTICULTURAL PRODUCTS, &c.

The list of premiums on horticultural and household products will be published next month.

PREMIUMS FOR ESSAYS.

I. The best paper treatise on Agricultural Chemistry \$10
II. The best essay on the Rotation of Crops, best suited to the soils of this State, . . . 20
III. The best essay on the General Management of the Farm, . . . 20
IV. The best essay on the introduction of New Agricultural Products, . . . 20
V. The best essay on the Management and Application of Manures, . . . 20

TO ARTISTS.

I. To the painter of the best specimens of Original Portraits of Domestic Animals—A Gold Medal.
II. To the engraver of the best specimens of Portraits of Domestic Animals on wood—A Gold Medal.

PUBLIC SALE OF STOCK.

On Friday, Sept. 30, there will be a public sale of stock; gentlemen wishing to dispose of their stock are requested to enter them with the Recording Secretary previous to the 15th Sept., that the catalogue may be prepared in season.

RULES AND REGULATIONS.

Applicants for premiums are requested to pay particular attention to the notes attached to the premiums on Dairy Cows, Fat Cattle and Fat Sheep, Butter and Cheese, Field Crops, Maple Sugar, and to the following regulations.

All persons who intend to exhibit cattle, horses, sheep or swine, should give notice to LUTHER TRUCKER, Recording Secretary, Albany, previous to the 15th September, in order that the necessary accom-

modations may be made for them, and all animals must be on the ground by 9 o'clock of the 28th.

All persons intending to compete for the premiums on plows, must send their plows to the Recording Secretary, Albany, previous to the 1st of August next, that the committee may have opportunity to test them thoroughly, and at such times and places as they may think best, and be prepared to report at the Fair.

All other agricultural implements must be sent as above, on or before the 25th of September, that the committee may have an opportunity to test them in the day before the exhibition.

The statements required from those who compete for field crops, must be sent to the Recording Secretary, Albany, previous to the 1st of January, 1843, and the premiums will be awarded at the annual meeting of the Society, on the third Wednesday in January.

It is very desirable that all those who intend to compete for the premiums on butter and cheese, maple sugar, cocoons, silk, &c., should have their specimens in Albany early on the morning of Sept. 27, that they may be deposited in their appropriate places, and the rooms suitably arranged on the day previous to the Fair.

All premiums will be paid in cash or note at the option of the winner.

The premiums for essays, to artists, and for agricultural implements, will be open to the United States; but all others will be confined to residents of this State, who are members of the Society, or who may become so by the payment of one dollar on entering their articles.

Competitors for the premiums on essays may forward their manuscripts to the Recording Secretary, Albany, previous to the first of June, 1843, free of postage.

A Doubter.

The philosophic Tucker divides mankind into two great families, the Knowalls and the Searchers. Our correspondent S. W. places our friend David Thomas among the latter, a very respectable connexion indeed, but not a numerous one. We suspect that some of the same blood runs in his own veins. The Knowalls in this world have a remarkable comfortable time of it; but the Searchers, a meddlesome set of dogs, are always making difficulty for other people and never satisfied themselves. O! for a pope and an infallible church—in agriculture we mean—certainly we would not say any thing about a Babylonish lady, whose character and pretensions have been among the saints so long a matter of discussion. But if we only had an infallible agricultural head, every thing would be quiet and comfortable; this terrible inkshed would cease; and our quills, instead of being worn to the stump in inditing many a goose's lucubrations, might repose quietly in the wings of those branches of the family to whom they originally belonged.

"D'Alenbert said that the first qualification for a Philosopher was the faculty of doubting. As unreasonableness induces us to embrace every absurd improbable theory, so does the faculty to doubt enable us to scan every theory, both by the tests of scientific proof and the sober lessons of practical experiment. David Thomas is clearly one of the number of those individuals in whose mind this cardinal qualification of the philosopher is most fully developed. In some of his communications on botany, he has sometimes noticed the small blunders and marvelous conceits of certain *cammoisseur* writers, with a spice of humor and pleasantry suited to the nature of the offence; but in this address, given in this month's Farmer, which relates to the all important theory of the nature and action of manures, he has taken up the theory of Professor Liebig, in relation to the mysterious action of plaster on vegetation, and shown most conclusively from his own experience, and the general experience of our whole rural population, that the theory of the learned professor is at least shaken by long established and often repeated experiments." S. W.

It is a curiosity to find a man who places too low an estimate on his own abilities.

Sugar from Indian Corn and Stearine from Lard.

We have received from the Commissioner of Patents, always on the alert to collect and diffuse useful information, an Essay on the manufacturing of Sugar from the corn stalk by William Webb of Wabington, Delaware; and a communication on the subject of Oil and Stearine from Lard—in a pamphlet published by the National Agricultural Society. They are highly interesting and valuable. We shall select only those parts which are directly practical; omitting such as may be considered too scientific for general readers. The prospects which they hold out, especially in respect to the product of sugar from maize, are very highly encouraging. The first step only in the process is as yet taken; and especially it remains to be seen what are to be the expenses of the process. It is confidently stated that eight hundred or a thousand pounds of sugar may be produced up in an acre of corn, planted as Mr. Webb directs. We shall be ready to believe it when it is done; in the mean time we design not the slightest impugning of Mr. Webb's integrity and intelligence, and caution no distant or doubtful, which should interfere with the immediate and faithful trial of the experiment. Heaven grant that these expectations may be realized on the care of humanity for no other reason, if human comfort is taxed and human life used up so cruelly and so prodigally, as it is in this pamphlet represented to be in the manufacture of sugar from the cane.

I have felt considerable interest in the plan for extending the cultivation of sugar in temperate climates, and have made many inquiries; first, upon the Beet, and recently upon Maize, or Indian corn, in the hope of discovering some mode by which the desired end might be attained. The results from the latter plant have been extremely encouraging. The manufacture of sugar from it, compared with that from Beet, offers many advantages. It is more simple, and less liable to failure. The machinery is less expensive, and the amount of fuel required is less by one-half. The quantity of sugar produced on a given space of ground is greater, besides being of better quality.

The raw juice of Maize, when cultivated for sugar, markets 10¢ on the stone (one ton) while the average of cane juice (as I am informed) is not higher than 8¢, and beet juice not over 7¢. From 50 qts. (dry measure) of the former, I have obtained 4 pounds of sugar, or 80 lbs. of syrup, as denominated to the point suitable for crystallization. The proportion of crystallizable sugar appears to be larger than is obtained from cane juice in Louisiana. This is accounted for by the fact, that our climate ripens corn perfectly, while it rarely if ever happens that cane is fully matured. In some cases the syrup has crystallized so completely, that less than one sixth part of molasses remained. This, however, only happened after it had stood from one to two months. There is reason to believe that if the plant were July ripe, and the process of manufacture perfectly performed, that the crop might be entirely crystallized without the use of molasses. This perfection in the manufacture cannot however be attained with the ordinary apparatus. Without any other means for pressing out the juice than a small hand-mill, it is impossible to say how great a quantity of sugar may be produced on an acre. The experiments have been directed more to ascertain the mechanical quality of the corn stalk, than the amount a given quantity of ground will produce; but the calculations made from trials on a small scale, leave no room to doubt that the quantity of sugar will be from 800 to 1,000 pounds.

Another mode of cultivation, to be employed in combination with the one first proposed, consists simply in raising a greater number of plants on the same space of ground. By this plan, all the unfavorable results above mentioned were obtained; a much larger quantity of sugar was produced, and of better quality.

The juice produced by this mode of cultivation is remarkably pure and agreeable to the taste. Samples of the sugar yielded by it are now in the Patent Office, with a small hand-mill by which the stalks were crushed.

On the whole, there appears ample encouragement for perseverance; every step in the investigation has increased the probabilities of success—no con-

dition having been discovered why it should not succeed as well, if not better, on a large scale, than it has done on a small one. In the first place, it has been satisfactorily proved, that sugar of a excellent quality, suitable for common use with all returning, may be made from the stalk of Maize. 2d. That the juice of this plant when cultivated in a certain manner, contains an elastic matter remarkably free from foreign substances. 3d. The quantity of this juice, (even supposing we had no other evidence about it) is sufficiently demonstrated by the great amount of nutritive grain which it produces in the natural course of vegetation.

It is needless to expatiate on the vast advantages which would result from the introduction of this manufacture into our country.

Grapes are too used in the West, in such overflowing abundance, that the markets become glutted, and inducements are offered to employ the surplus produce in distillation. This business is now becoming desirable. The happy conviction is spreading rapidly, that the use of alcohol as a beverage, instead of conferring to health and strength, is the surest means of destroying both. Some other production, therefore, will be required, in which the powers of our soil may be profitably employed. This, it is hoped, will be found in the business now proposed. Instead of distilleries, converting food into poison, we may have sugar houses, commencing at our doors an article in universal demand, not merely useful, but necessary; furnishing as it does one of the most simple, natural, and nutritious varieties of human sustenance, found in the whole range of vegetable production. It is said that the general use of sugar in Europe has had the effect to extinguish the scurvy, and many other diseases formerly epidemic.

The time of the crop in the sugar island, (saye India) is a season of gladness and festivity to man and beast. The meagre and sickly among the negroes exhibit a surprising alteration in a few weeks after the mill is set on motion. But though the use of sugar is attended with all these agreeable effects, there is no agricultural production furnished in so great a service of human life. The reason of this moiety may be found in the climate, and the peculiar situations in which cane is cultivated. How much then will be taken off the load of human suffering, if this article can be produced in more temperate and healthful regions! The wide prairies, and fertile alluvial valleys of the West offer an ample field, rich with all the elements of success.

It may be doubted whether a tropical country can ever furnish a great amount of exports, (except through the means of compulsory labor. It appears then, highly probable, that if the inhabitants of temperate countries wish to continue the use of sugar, they must find some means to produce it for themselves. The Beet appears to succeed well in Europe, and the manufacture from it is extending rapidly; but there is no hazard in making the assertion that Indian corn is far better adapted to our purpose.

The following mode of cultivating the plant, and working the sugar, is the best that can now be offered.

The kind of soil best adapted to corn is so well understood, that no directions on this point are necessary; except that it should be rich, the water the better; it need not be fertile, manure must be applied either ploughed in or spread upon the surface, or used in any ways, according to the ability of the owner. Sowing can be done at any preparation for the crop, after a clear and well turned under, and harrowed fine immediately before planting.

Select for seed the largest and best ears of any variety of corn you disposed to throw up, and spread it in branches; that kind most productive in the neighborhood, will be generally the one best adapted to the purpose. The planting should be done with a drilling machine. One man with a pair of horses, and an assistant of this kind, will plant and cover, in the most perfect manner, from ten to twelve acres in a day. The rows (if practicable, let them run north and south) two and a half feet apart, and the seed dropped sufficiently thick in the row to insure a plant every two or three inches.

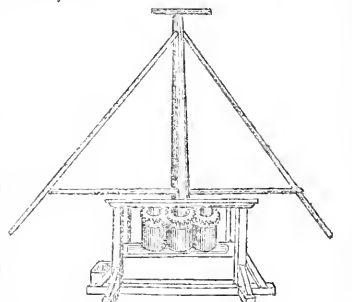
A large harrow made with teeth arranged so as not to injure the corn, may be used to advantage soon after it is up. The after culture is performed with a cultivator, and here will be perceived one of the great advantages of drilling; the plants all growing in lines, perfectly regular and straight with each other, the horse-hoe cuts the earth and cuts up the weeds close by every one, so that no hand-labor will be required in any part of the cultivation.

It is a part of the system of cane planting in Louisiana, to raise as full a stand of cane upon the

ground as possible; experience having proved that the most sugar is obtained from the land in this way. As far as my experience has gone, the same thing is true of corn. This point must therefore be attended to, and the deficiency, if any occur, made up by timely replanting.

The next operation is taking off the ears. Many stalks will not produce any, but wherever they appear, they must be removed. It is not best to undertake this work too early; as when the ears first appear, they are tender, and cannot be taken off without breaking, which increases the trouble. Any time before the formation of grain upon them, will be soon enough.

Nothing farther is necessary to be done until the crops are ready to cut for grinding. In our latitude, the cutting may commence with the earlier varieties, about the middle of August. The later kinds will be ripe in September, and continue in season until cut off by frost. The stalks should be topped and bladed while standing in the field. They are then cut in bundles, and taken to the mill. Fine tops and blades, when properly cured, make excellent fodder; and better it is believed, than any hitherto used; and the remainder, after passing the rollers, may easily be dried and used in the same way; another advantage over the hay, which, after the juice is expressed, is usually burned.



The mills should be made on the same general principle employed in constructing those intended for grinding corn. An important difference, however, will be found both in the original cost, and in the expense of working them. Judging from the comparative hardness of cane and corn stalk, it is believed that one fourth part of the strength necessary in the construction of a cane mill, will be amply sufficient for corn; and less than one fourth part of the power will move it with the same velocity. It may be made with three upright wooden rollers from twenty to forty inches in length, turned so as to run true, and fitted into a strong frame work, consisting of two horizontal pieces sustained by uprights. These pieces are mortised to admit wedges on each side the pivots of the two outside rollers, by which their distances from the middle one may be regulated. The power is applied to the middle roller, and the others are moved from it by means of cogs. In grinding, the stalks pass through in the right side of the middle cylinder, and come in contact with a piece of frame work called the dash-board, which forces them backwards so that they pass directly the rollers again on the opposite side of the middle one. (See cut.) The modern improved machine is made entirely of iron; three horizontal rollers arranged in a triangular form, one above and two below, the cane or stalk passes directly through, receiving two pressures before it escapes. The lower cylinders are contained in a small cistern which receives the juice. The latter machine is the most complete, the former the least expensive. These mills may be moved by cattle, but for large operations, steam or water power is preferable. When the vertical cylinders are turned by cattle, the axis of the middle one has long levers fixed across it, extending from ten to fifteen feet from the centre. To render the same firm, the axis of this roller is carried up to a considerable height, and oblique lances of wood by which the oxen or horses draw, are extended from the top of the vertical axis, to the extremities of each of the arms. When horizontal cylinders are propelled by animal power, the upper roller is turned by cogs at one end, which are caught by cogs on a vertical shaft. It is said that in the West Indies, the purest cane juice will ferment in twenty minutes after it enters the receiver. Corn juice has been kept for one hour before boiling, without any apparent injury resulting;

at so much delay is not desirable, as it may be attended with bad effects.

"The process which has been employed in the manufacture of *Maize* sugar, is as follows: The juice, after coming from the mill, stood for a short time to deposit some of its coarser impurities; it was then put off, and passed through a double strainer, in order to get rid of such matters as could be separated in this way. Lime water, called milk of lime, was added in the proportion of one or two table spoons full to the gallon. It is said by sugar manufacturers, that knowledge on this point can only be acquired by experience; but I have never failed in making sugar from employing too much or too little of the lime. A certain portion of this substance, however, is undoubtedly necessary, and more or less than this will be injurious; but no precise directions can be given about it. The juice was then placed over the fire, and brought nearly to the boiling point, when it was carefully skimmed, taking care to complete this operation before ebullition commenced. It was then boiled down rapidly, removing the scum as it rose. The juice was examined from time to time, and if there was no appearance of foamy particles which would not rise to the surface, it was again passed through a double strainer. In judging when the crop was sufficiently boiled, a portion was taken between the thumb and finger, and if when moderately cool, a thread half an inch long could be drawn, it was considered to be crystallized, and was poured into broad shallow vessels to dry. In some cases crystallization commenced in twelve hours; in others, not till after several days; and in no case was the process completed as to allow the sugar to be drained in less than three weeks from the time of boiling. The reason why a great length of time was required, I was not yet best able to discover. There is no doubt that an improved process of manufacture will cause it to granulate as quickly as any other.

"Enough has been said to enable any one to dispose of the manufacture of sugar from *Maize* on a large or small scale. As the profits of the business, I shall make no positive assertions; experience on the subject is yet too limited to warrant them; and as all the facts in relation to it are now before the public, every one interested can draw his own conclusions. It is said by those acquainted with the cultivation of the cane, that that business cannot be carried on profitably on less than one hundred acres in crop, and attempts on a small scale will be certain to fail with a great loss of time and labor. How far this may be applied to corn, remains to be seen.

"Some comparison between the cultivation of cane and that of corn may perhaps be interesting.

"The cane lands in Louisiana are redeemed to agriculture, by steeper embankments along the river, and by numerous ditches, which extend back into the swamp to a considerable distance beyond the line of cultivation. The ground is still further divided by smaller ditches into lots of from one to two acres in extent. It is extremely rich and productive; but the expense of draining, and keeping up the embankments, must be very considerable; this forms the first difference to be noted in the culture of the two plants under consideration.

"The best season for planting cane in Louisiana, is in the fall, which is also the time of harvest, when labor is most valuable, and the greatest exertions are required to secure the crop before it is destroyed by frost. But the most striking difference will be found in the cost of seed, and in the labor of planting. The cane is propagated by layers; these are partly furnished from the tops of the plant, when cut for grinding, but are principally ratoon. Of the latter, it requires the produce of one acre to plant three. The rain from one acre of corn will be sufficient for planting forty acres. Therefore, the difference in expense for seed, will be some to thirteen.

"In planting cane, furrows are made with the plough from two and a half to three feet apart; in these the layers are placed in a double row, and the earth drawn over them with hoes to the depth of three or four inches. In the spring, before the plants are up, this covering is partly scraped off, so as to leave them buried from one to two inches.

"From this account, it is evident, that no more manual labor will be required to drill fifty acres in corn, than to plant one acre in cane. The labor of cultivating the latter plant during its growth is also greater; but this may be balanced by the extra work required to take off the embryo ears from the corn. When cultivated in the mode recommended, the stalk of corn is soft, remarkably heavy, and full of juice from bottom to top. The amount of power required for grinding them must be much less than is necessary

for cane—or, what is the same thing, an equal power will do it with greater rapidity. The average yield of cane in Louisiana, is one thousand pounds of sugar, and forty five gallons of molasses per acre.

"From the above comparative statement, it would appear that one half the amount of crop from corn would be equally, if not more profitable.

I will only add in conclusion, that whether or not sugar from the corn-stalk may soon become an article of profitable export—its manufacture in the simplest form will enable every family to supply themselves with this article for common use, now become so much a necessary of life, and thus save a considerable bill of expence yearly paid for foreign sugars.

(Translated at the Patent Office, and highly confidential of Mr. Webb's Esqy.)

H. L. ELLSWORTH.)

Extract from *Annales de la Société Polytechnique*, *Prologue*, No 22, for October, 1-39.

SUGAR OF CORN.—There is no plant of greater general interest or utility than Indian corn. It can serve, under a great variety of different forms, for the enrichment of man and the domestic animals, and above all, the application of industrial sciences.

In reference to its saccharine qualities, *Maize* has not been sufficiently appreciated. The cultivator reaps, that under the tropics the stalk of this plant is so very succulent that the Indians suck it as in other places they do the sugar cane.

M. Pallas, who has made a great many researches on this application of *Maize*, has arrived at a remarkable result—he has found by many experiments both in France, and more recently in Africa, that this vegetable, by a simple modification applied to its culture, is able to furnish a much more considerable quantity of sugar, than by the ordinary method.

This method consists in detaching from the plant, immediately after the fecundation of the ovaries (after the plant has inselled) the young ear, and to leave it to develop itself thus deprived of its fruit. Arrived at maturity, the stalk of the Indian corn contains crystallizable sugar in quantity very often double that obtained when the plant is left to mature with the grain. In fact, by the ordinary mode of culture, the grain is nourished at the expense of the sugar in the stalk, as it absorbs a great quantity of this immediate principle, which, by the process of nutrition, is converted into starch. On the other hand, if the young ears are immediately destroyed, the sugar intended to nourish them remains in them where it accumulates, and the *Maize* plant is thus converted into a true sugar cane, while the fibrous part can be manufactured into paper.

The quantity of sugar is so very great in the stalk of the *Maize* deprived of the ear, that the pulp of this vegetable retains a sensible flavor of sugar even after it has been dried, and is easily obtained by examining the specimens deposited by M. Pallas in the Bureau of the Academy of Sciences. These results are so important as to merit experiments on a grander scale, which may obtain thus for France a source of new industry in the manufacture of sugar.

We give no extracts on the subject of obtaining Stearine from *Lord* for the purpose of making candles equal to wax, as it would not be generally intelligible and is adapted to the manufacture upon rather a larger scale than could be used in families, as the patentee advises that "To operate with advantage, the vessel in which the boiling is effected should be of considerable capacity, holding say from ten to a hundred barrels"—or about as large as a common log cabin. We have no reason to doubt the success of the process.

Carrots.

These are one of the most important crops a farmer can cultivate, whether for his dairy, young stock, sheep or swine, or whether they are considered as a crop which yields rich remuneration for his labor, or as one leaving his land in a healthful and active state when taken off. They succeed as well, and perhaps better, when sown successively on the same soil for many years. The ground for them should be deeply and thoroughly pulverized, and then they will send their long roots to a depth which the spade has not penetrated, thus to some extent, imitating the work of the subsoil plough by breaking the hard soil beneath them.

Carrots for stock should be sown early, before the

spring and summer droughts, which are very injurious to them, come on. The best manure we know of for them, is that recommended in No. 2, present vol. of N. G. Farmer, for gardens. If this is not convenient, mould from the wood, answers a very good purpose. They must be thinned and kept very clean, which in fields may be done with a corn harrow or cultivator.

W. B.

Mount Osceola, April, 1842.

Milberry Trees and Silk Culture.

An old friend of ours, Gen. Dickinson of Deerfield, Mass., desires us to say that he has 100,000 of milberry trees, of the Canton, Multicaulis, Moretti, and several hardy varieties, which he would be glad to dispose of on the most reasonable terms. The public mind must presently be aroused to the importance of silk raising and this most valuable article of culture. The apathy and incredulity of the public in regard to it is deplorable. They seem now like a bird and founded horse, whom you can neither by coaxing or driving even get into a trot. What may be accomplished under a new ruler and since the Commissioner of Patents has mounted the silk horse, with bright spurs and a new whip, we shall see. We only add that whoever deals with Mr. Dickinson, may, we are satisfied, rely entirely upon his honor.

The Le Roy Female Seminary.

Mr. Emmon—In some of the early numbers of the New Genesee Farmer, a correspondent attempted to show that Female Seminaries of the present day are unsuitable places for farmers' daughters, and that a modern liberal education is calculated to make them dissatisfied with their country homes and rural life; and in your intercourse with the agricultural community, I doubt not that you find the same opinions quite prevalent, especially among those who, being destitute of a good education themselves, are ignorant of its true value and influence, and know nothing of those institutions against which they disclaim.

It is not my present intention to expose the fallacy and injurious tendency of such sentiments, but merely to express a regret that all who cherish them could not have the privilege which I enjoyed last week, of witnessing the examination at the Le Roy Female Seminary, under the management of Miss Emily E. Ingham, Principal. The catalogue of pupils for the past year shows the number to have been 232. The winter term closed on the 15th of April, with four days public examination. Each class in the school was examined separately and thoroughly in the various branches of study, and each pupil, excepting the junior class, read a composition of her own production. The proficiency and depth of research manifested by the pupils in their examinations, and the knowledge, talent and sentiment displayed in their compositions, reflected the highest credit on the teachers, and I gave conclusive evidence that they had been eminently successful in their avowed aim, "to make thorough scholars, independent thinkers and reasoners, and useful members of society."

Many of the pupils are farmers' daughters, and if their parents were asked whether they think the instruction imparted at this institution is "calculated to make them discontented and unhappy," I have no doubt their reply would be in substance like the expression I heard made by a worthy farmer from Livingston, who had come to witness the examination and take home two lovely daughters, in parting with the principal and teachers his last words were, "my only regret is, that I have not more daughters to send you."

The next term of this Seminary commences on the first Wednesday of May.

B.

"See his Report in our last number."

FLOWERS.

The following is a pretty poem received from fair hands, which, we hope, will suit others for our use, even sweeter and more fair.

For the New Genesee Farmer.

The following lines were suggested by the perusal of an article on Floriculture in a late number of the New Genesee Farmer.

Flare the flowers, the fair young flowers,
Where'er their dwelling be;
Though springing in the mountain side—
Or 'neath the greenwood tree.

Though found in each sequestered nook,
Of every woodland shade;
Or blooming 'mid the gay parterre,
By tasteful fingers made.

A pleasant task it is, I ween,
The fragrant things to rear,
Whose wealth of radiant loveliness,
Life's weary hours may cheer.

To watch the opening buds that spring,
"Nest summer's genial showers;
Each striving in its blushing pride,
To bloom the fairest flowers.

And when at last the blossoms lie
All withered at our feet,
And tawny in the pressing breeze
Their perfumed odors sweet;

There comes from every fading flower
A lesson for the heart,
That earth's most fair and lovely things
"The soonest must depart."

"For careless teachers are they all,"
And emblem too, of youth,
Its days of infant purity,
Its trusting years of truth.

And like the human flowers that spring
In luxury 'round our hearth,
Till, fed from our sight-away,
We know not brief their worth.

J. L.

Rural Life and Pleasures.

MR. COLMAN—

Your correspondent, Zelia, says that our date and interest should prompt us to bestow our co-operation to make your columns instructive and interesting; and that this cannot be fully attained unless your female readers render some assistance.

With an imperfect education, I feel much diffidence in presenting you this communication. But since my education taught me to perform every known duty, I am most happy to render my part, humble as that may be. The offering, if not accepted for its intrinsic value, may be welcome for the good intentions which dictate it. I have not the vivid imagination and enviable sensibility of W. B., nor the fund of interesting ideas of Zelia; but I hope I may be allowed to claim for myself a grateful and holy reverence for my Creator, and a thirst for improvement in science, in literature, in floriculture and horticulture, in rural and domestic economy, and finally, in every thing that pertains to the development of human virtue, the advancement of good morals and the present well-being and future happiness of mankind. An attention to flowers and shrubs, service to inspire a taste for natural beauty every where, and for all that is delightful and lovely in the works of our Creator. It is our duty to cherish and strengthen and nourish the benevolent affections, and a sympathetic attachment for all that is around us. Much certainly is to be done for many of us, in order to prepare our minds for enjoyment in the works of nature, in erasing our false ideas and prejudices in relation to the true sources of our best and purest pleasures. A ramble through the green fields and over the hills, may be prompted by mere listlessness or accident, or if you please, by romance or fashion; and without some cultivated taste for rural scenery or some sympathy with nature, we may not feel in such case a single emotion of heart felt enjoyment, nor one grateful or reverential aspira-

tion of the soul to heaven, for the infinite abundance and exquisite and countless forms of beauty which are spread around us.

But we cannot expect every one to look upon nature as in every department and object alive with the presence of God, nor to feel deeply conscious of the great source from whence these pleasures flow, and happy always in this recognition of the divine goodness. But I should rejoice, if any motive, even of an inferior character, would induce them to spend some part of their time in the fields and the garden and the forests, by the silver stream and by the mirrored lake, rather than that they should not do it at all. But in order to taste the deep and exhaustless fountains of pure bliss, enclosed, if I may so say, within the folds of every shooting plant, or under their full developed leaves, amidst all the secrets and all the wonders of vegetable life, we must feel and reflect and meditate upon the design and intentions, for which their author formed them, and the sublime and happy influences, with which they are capable of inspiring our minds. It is with peculiar pleasure I peruse an occasional line from the pens of a few of the many gifted females of our happy and privileged country. May they dig deep for the rich stores of intellectual wealth within their reach, and bring them forth to adorn and bless the community. They cannot exert their talents too much in order to render rural scenery attractive and rural life delightful; and to show how much its pleasures and privileges are to be coveted.

Happy is the condition of that rural retreat, where the peaceful labors of agriculture and the calm pleasures of country life divide the hours; where abundance comes as the harvest compensation of labor; contentment springs out of an innocent mind and a guiltless conscience, and simple mirth and youthful glees are but the pourings out of a full heart, like the bubbling and sparkling waters from a gushing spring. It is delightful to see the love of nature in her simplicity, in her beauty, in her variety, in her grandeur, in her glory, highly cultivated and strengthened; to pour our hearts out in grateful admiration and wonder at the exhibitions and testimonials of the divine bounty in the fields, the forests, the fields, the fountains; in the multiplied forms of life every where crowding upon our sight, and every where manifesting their own enjoyment of existence: in the budding and flowering foliage of spring, in the golden and ripened harvest, in winter's glittering mantle, in the reddening dawn, in the gorgeous sunset, and in the star spangled night. When to such tastes these are added stores of intellectual wealth, constantly increasing, the charms of unbroken and warm domestic affections, the mingling of sympathetic hearts, which in every kind and every elevated emotion, vibrate in harmony, and with all a deep and grateful sentiment of dependence and duty to the great and exhaustless source of all happiness, where on earth shall we look for a condition more privileged and blessed; what stimulants does it furnish to virtuous industry, and what all vibrations to those pains and afflictions which are inseparable from our humanity.

FLORA.

Zelia's Domestic and Political Economy—
Rural Taste, &c.

MR. COLMAN—I felicitate you on the acquisition of such a female correspondent as Zelia; her lessons on domestic economy if lived up to, will do more towards curing hard times, and commencing a healthy social reform, than a hundred essays on political economy, or twice that number of common-place high tariff or home league resolutions; in fact, stern necessity alone is now dealing with the people, and bringing about that state of things which Zelia would effect by moral suasion, and the beauty of her own in-

dividual and may I not say, truly intellectual example.

Since "foreign goods and trinkets" cannot be paid for any longer in paper contrivances, prices in New York have fallen so ruinously low, that next to none will now be imported for the remainder of the fiscal year; and the great puzzle now is with our national financiers, how they are to raise a revenue at all, if they increase the present tariff of duties, since large quantities of foreign goods are now being reshipped to avoid the payment of our present tariff; what a blessed thing it is that all foreign balances against us can now only be paid in coin, as nothing short of this would have stopped importations; a call for specie strikes at the life of our Banks, and they are so averse to dying, that they had rather see all the ladies in the country go without broader shawls and velvet cloaks, than to lose even a note of their coin.

Who is so blind as not to see in this state of things a better and more lasting encouragement to silk culture and home industry, than all the special legislation Congress could bestow in the shape of high tariff, or still more senseless retaliatory restrictions? "What has England's high tariff restrictions done for her, but increase the volume of her population, her paupers and her poor rates? Her manufacturing industry has been stimulated by protection, until it was necessary to give to her agriculture like protection, in order to make her independent of other nations for bread, and also to stimulate the home market for her surplus manufactures. Let us then in these United States, with our vast territory, our endless rolling prairies, and superior sunny climate, be slow to think that we have the same need of restrictions on trade, as little, cold, wet, over populated Great Britain!

Zelia inculcates domestic simplicity and economy, in a manner which shows that she has arrived at the corner stone of political economy almost without knowing it; her lessons show that simplicity in domestic arrangement is the true handmaid to mental culture, that meretricious display and fashionable excess, can hardly conceal vulgarity of mind, or make up for a deficient education. I hope Zelia will write often for the Farmer; let her tell her log house sisters, to keep their scanty furniture "bright and clean"; a little white wash both within and without, a clambering vine, a grass plot, a garden with a few flowering shrubs and plants, will speak a much better civilization and mental culture, for the unknown inmates of that cabin, than the most ambitious farm house in the land.

S. W.

Floriculture.—*Campanula rotundifolia*.

MR. COLMAN—I have ever read with a great deal of interest the articles in your Journal on the flowers of spring, summer and autumn.

I have admired the unbiased judgment and fine taste, which led the writer of those sketches to place—not only in his garden, but in his list of flowers—side by side with imported exotics, our native *Hepatica triloba*, *Sanguinaria Canadensis*, *Lobelia cardinalis*, and even the neglected *Macrorrhynchus racemosa*, and many other native beauties usually overlooked.

But I have looked in vain for any reference to one lovely indigenous flower, and can only excuse this neglect of my favorite by supposing the gentleman a stranger to its existence. If this be true, I am certain he would not object to an introduction.

If on some bright day in June, he will go with me while my oxen rest from the plough, to one of the woody uplands of Genesee county, where the underwood is thickest and the soil so mixed with flints that a blade of grass can hardly grow, we should occasionally discover a little blue bell about the size of an acorn hanging on a stalk a few inches in length, and so slight as to be moved by every breeze. If he will

en return with me, I will show him the magical effects of cultivation on the same plant.

Two seasons have passed since one of these wild-
wrens was transplanted to our garden. I hardly
pected to see it live; but in the place of one low
alk, and one bell, from that same root we had, last
summer, from June until October, a succession of
wers growing on stalks from two to three feet high,
d often three bells on a stalk. I one day counted
ry.

Notwithstanding the change in the flower-stalks,
bells seem in no wise changed, but retain all their
iginal delicacy, thus proving to a demonstration that
ey have not, like many other *bells*, been injured by
mination.

I know not its botanical name, or if it have any—
an admire it without one—but it has beauty enough
tainly, to compensate for the longest and homeliest
t that any Botanist ever invented. E.

Le Roy, March 11th, 1842.

The plant to which our correspondent refers, is one
tich we think from his account, we have seen
d admired, and which we suppose equals the
tanical name of *Campanula rotundifolia* or Flax
ll-flower. Its name, *campanula*, signifies its bell-
ppo. It is among a class of flowers easily trans-
ferred to the garden, and greatly improved by cultiva-
n. Beck's Botany describes it thus: *Stem*, 8—12
ches high. Radical leaves cordate (withering
ly). *Flowers* few, large, blue, in a loose terminal
vide or raceme. (If E. will send us one of the
ossoms when they appear, in a letter or paper, he
ll oblige us, and we can ascertain the name.)

Large Breed of Hogs in Clyde.

Clyde, February 21st, 1842.

R. EDITOR—

DEAR SIR—I have a breed of hogs that grow to a
ge size, one of which about two and a half years
I killed on the 14th inst., that weighed when
essed 833 lbs., of which 7½ lbs. was lard, and the
me weighed 56 lbs. each.

I commenced feeding him about the middle of
vember with peas and corn, at which time he was
low condition. When alive, he measured 6ft. 8in.
round his body just back of the fore shoulders. The
ight of this animal sounds large to us in this neigh-
hood; and if you consider him deserving of it,
a will no doubt pay him the compliment of a note
in your useful paper, the New Genesee Farmer.

Your obt' servant,

JOHN POTTS.

This hog certainly deserves a memorial, and is
rthy of being an Emperor among his own country-
n. He must have taken a lesson of the frog, who
d to equal the ox, but with a good deal more ease,
s and without ending in the same unhappy explo-
n. He was as heavy when dressed as fat as the
en that are killed. Our correspondent does not
e his breed of swine a name; and it might be
med unwell to call them the Potts breed; but con-
sidering the value of such pork for boiling, we might
forgiven if we should call them the Pot Breed.
at's "doing the thing to a U."

The Ne Plus Ultra.

Since giving a notice of the Clyde Breed of Hogs
m Mr. Potts, we have received the subjoined from
correspondent in Maine. The Yankees may well
of this "Beateum;" and it will be a small affair
any other state to talk of "going the whole Hog"
r this. The amount of loss in killing is very small
contradicts the usual experience.

Maine Pig vs. Genesee Pigs.

Mr. Adams, in the last number of the New Genesee
rmer, says "Mr. Marks had four Berkshires which
ighed 1838 pounds, and Mr. Corter's two weighed
60 pounds, when twenty months old." Now, Mr.

Editor, I have a tale to tell worth two of that. Mr.
Jansson, of this place, yesterday killed a pig twenty
two months and twelve days old, which weighed
alive 1010 pounds. Dressed he weighed 905 lbs.—
without the earl, that weighed thirty eight and a half
pounds. Making his whole weight 943½ pounds—a
loss of only 66½ pounds. He was a cross of the
Berkshire and Bedford—girted seven feet, and was
five feet and about ten inches in length. His keeping
all September last, was not high or expensive. Six
bushels of potatoes and two of meal, with weeds and
the spare milk of three cows, lasted him and two
breeding sows of the same age, two weeks. They
were fed but twice a day. The potatoes were boiled,
mashed up in a large tub, the meal added and water
enough put in to make it quite thin. In addition to
this feed night and morning since September, he has
had three quarters of corn at noon.

Your obt' serv't

WM. WATERMAN.

Cornish, Me., March 25, 1842.

Ornamental Trees.

[From Colman's Fourth Report.]

The cultivation of ornamental trees ought to be
strongly pressed upon the farmers. "Put a tree
down; it will be growing while you are sleeping."
Many of them enrich the country; all adorn it,
and thus essentially increase the value of an es-
tate, and render the country more healthful as well
as beautiful. Every place on a farm, where they
can grow without injury to the crop, ought to be
planted with trees. Timothy Walker, of Charles-
town, Middlesex county, lately deceased, left a
legacy of some hundred dollars to be expended in
planting ornamental trees on some of the great
roads in that town. This was a noble bequest;
and places him among the benefactors of the com-
munity. It is an example worthy of imitation.
A taste for the beauties of natural scenery can-
not be too much cultivated among us. A taste for
natural beauty is closely allied to a taste for moral
beauty. The more attractive our homes are ren-
dered, the more shall we love our homes; and the
love of home is the parent of many kind and no-
ble affections.

A taste for natural beauty is an original element
of the mind. It may be strengthened, elevated,
and enlarged by education; but it appears even in
the rudest minds, and thus speaks its divine origin.
I believe the perception of beauty exists in all ani-
mals; or why should they have been made so
beautiful?

Natick in Middlesex Co., was the seat of the first
Christian mission to the Indians, where the benev-
olent Eliot, designated as the Apostle, sought to
pour into the minds of these children of nature,
benighted with the thick darkness of superstition,
the heavenly rays of inspired truth. Eliot was
followed by a worthy successor, Oliver Peabody.
The Indians appreciated the blessings of the religion
of peace and love which he taught them; and in
gratitude for his services, these sons of the forest,
to whom the trees seemed as their own kind-
red, came in a deputation bringing two elm, and
asked leave to plant in front of the humble dwell-
ing of the missionary these "*trees of friendship*."
This was in 1722, and these trees stood for ninety
years, when one was rived by lightning, and the
other seemed to perish through sympathy. When
the successor of Mr. Peabody, Mr. Badger, was
settled in 1753, the Indians offered the same token
of respect and the same pledge of good will to
him. These trees are still in full vigor, and remain
as beautiful monuments of affections, which
have gone out on earth, but are destined to be re-
kindled and burn with a purer flame.

Nature is every where prodigal of beauty, as if
she would stimulate the passion for it to the ut-
most extent. Among the varied combinations of
charming objects, which mingle in a rural land-
scape, the trees are preeminent. Sometimes rising
in single cones so exact and symmetrical in their
form, that they seem the perfection of art; some-
times spreading their umbrella-like limbs in curves
and lines of the most graceful expansion; some-
times bending their boughs to the earth loaded
with golden and crimsoned fruit, and when the sun
pours its bright rays upon them, presenting not an

imperfect image of that sacred bush where the divine
presence wrapped itself in robes of fire; sometimes
seen in long single lines skirting the traveler's
path; sometimes in beautiful clumps and clusters,
affording a grateful shade to the panting herds;
at other times in the wide spread forest, shading
a valley with their deep and black green; here
again furnishing the mountain's side with their
thick and matted foliage; now in autumn robed in
the gorgeous vestments of more than oriental mag-
nificence; and often in winter bending under their
pile-up fleeces of snow, or glistening with match-
less splendor when cased in ice and changed into a
crystal forest of glass and diamonds; in all these
cases how suited are the trees to charm the eye and
delight the mind! Why should not the eye be
charmed? Why should not the imagination be
delighted? Why should we not take pleasure in
the beauty of God's works? Why should we not
do what we can to make our homes continually
more and more beautiful; and to multiply and fill
to overflowing these innocent sources of pleasure?

The country is full of poetic sentiment and re-
ligious monuments. The civilized inhabitants of
the country should seek to rise above the mere
drudgery of life, and make themselves familiar
with nature in her ever varying and charming as-
pects. It will not hurt their industry, but it will
cheer their toil to study the benevolence of the
Creator in the perfection of all his works; and, I
trust I may add without irreverence, to second his
provision for the happiness of his creatures in
multiplying every where around them the forms of
beauty.

I hope I shall be pardoned for the enthusiasm
which I may betray on this subject. Let those
who think my remarks out of place, kindly pass
them over. Penetrated to the depths of my soul
with a sense of the beauty of nature and the
"charms of rural life," my anxious soul for the
lowest laborer may have had his toil alleviated by
his self-expected quickened, and a sentiment of the dig-
nity of his own nature breathed into his heart by
a habit of observing and studying and enjoying
the wonders and glories of the visible creation
around him. I cannot think it difficult, under a
just education, to awaken this sentiment and form
this habit, even in the humblest minds; and what
sources of gratification in such case shall we open
to him, which the wealth of cities cannot purchase,
and what motives to religious trust and joy shall
we inspire, which written teachings can never im-
part. For what a prodigality of beauty is every
where manifested in the natural world! Light-
self is the perfection of beauty, and wherever it
spreads its glittering rays, it commands every thing
which it touches into beauty. Take the great ele-
ments of nature, the earth, the water, the sky, the
sun, the moon, the stars; and what beauty is re-
splendent in every one of them. Take the vege-
table tribes, the trees, the flowers and the verdant
fields; take the animal creation, from the fairy
bird that cleaves the liquid air with his burnished
wing, to the pearl of exquisite brilliancy, that lies
buried in the depths of the sea; and what a divine
beauty shines out in the whole. Examine the mi-
nutest atom, which you can pick from the earth
with the finest needle, the smallest flower that
drinks in the refreshing dew, the least insect that
floats in the sun-beam, the tenderest leaf that
quivers in the breeze, and the vast continent with
all its mixed and varied features of land and water,
of valley and mountain, of prairie and forest;
take the vast ocean, with its ceaseless heaving,
and its deep cerulean waves, and the golden and
crimsoned heavens at the rising and setting sun;
look at nature, even in her decay, in the variegat-
ed glories of autumn, or reposing under her jew-
elled mantle in the death of winter, look at every
thing in its individual form, or in its combinations,
and even in objects which seem offensive or loath-
some, or terrific,—all, all, is flooded with beauty.
I have stood hour after hour, gazing at the mighty
Niagara; and while I beheld in its tremendous
movement, an image of the Divine Power, and in
its ceaseless flow, a symbol of the Divine Eterni-
ty, yet in its deep torrent of living green, its glitter-
ing tresses, of a whiteness which the drifted
snow does not surpass, and in the dazzling iris,
spanning its troubled and foaming abyss, and
girding as it were, the lion's neck with a creature
of brilliant, beauty, ineffable beauty, pervaded
and triumphed over the whole; and there, of all
other places on earth, seemed to have fixed his
throne and to demand universal homage

Agents for the Rochester Seed Store.

A general assortment of seeds, from the Rochester Seed Store, may be found at each of the following places. Subscriptions will also be received there for the "New Genesee Farmer and Gardener's Journal."

Buffalo.....W. & G. Bryant.
Lockport.....S. H. Marks & Co.
Albion.....C. W. Swan.
Brookport.....C. W. Allen.
Scottsville.....Andrus & Garbutt.
Le Roy.....Tompkins & Morgan.
Batavia.....J. V. D. Verplank.
A. C. H.....R. & N. Wells.
Perry.....L. B. Parsons & Son.
Mount Morris.....K. Sleeper.
Geneseo.....J. F. & G. W. Wyman.
Canandaigua.....H. O. Hayes & C.
Yonk.....R. H. French.
Geneva.....Van Buren & Son.
Waterloo.....Abraham Duell.
Auburn.....T. M. Hunt.
Pulverna.....Holt & Mar.
Syracuse.....J. B. Fitch & Co.
Union.....E. J. Warner.
Owego.....D. Canfield.
Hamilton.....A. M. Mot.
M. B. BATEMAN.

Non-Resident Lands in Michigan.

THE undersigned respectfully announces to the public, that he has opened an office in this city for the specific sale of non-resident lands, now or hereafter to become due, in any of the Counties of this State and he will visit himself, or by a trusted party, the Counties, to obtain all necessary information upon the subject.

Persons wishing taxes paid in any of the Counties in Michigan, and forwarding to the undersigned the necessary amount of tax, and the proper order, together with an acknowledgment of their lands, may rest assured that their interests shall be scrupulously attended to.

His charges will be all times reasonable, and proportionate to the services rendered.

The undersigned will endeavor to make himself thoroughly conversant with the value of lands in every part of the State, and he may be enabled to give information to all enquirers, and if desired, will undertake the sale of the same. He wishes to meet respectfully to refer as to character, and capacity, to reclaim the pledges above given, to the undersigned.

J. L. WHITING.

Detroit, March 1, 1840.

I think such an office as is proposed by Dr. J. L. Whiting, highly necessary for the convenience of the community, and that he is exceedingly well qualified by long residence in Michigan, his personal knowledge of the country, strict integrity, and domestic business habits, for the discharge of the proposed Agency.

C. C. TROWBRIDGE.

I concur fully in the sentiments and expressions expressed in the above notice of Dr. J. L. Whiting, and am, therefore, in full

W. M. WOODBROOK, Governor of Michigan.

I have been acquainted with Dr. J. L. Whiting for many years, and fully concur in the views above expressed by Mr. Trowbridge.

Dr. J. L. Whiting is in my judgment fully competent to discharge the duties of the proposed Agency, and I cheerfully recommend him to the public.

From long and intimate acquaintance with Dr. J. L. Whiting, I am happy to testify my full concurrence in the above statements.

THOMAS ROWLAND, Secretary of State.

Jan. 10th, Detroit, March 1, 1840.

Having long known Dr. J. L. Whiting, I most cheerfully concur in the above sentiments, and would further endeavor to him any facilities in the Land Office may afford in all the objects of his advertisement.

J. REARSELY, Receiver.

I have been intimately acquainted with Dr. J. L. Whiting for several years, and fully concur in the sentiments above expressed, in relation to him.

D. PITCHER, Mayor of Detroit.

Such an office as Dr. Whiting proposes, will be of great utility and convenience to non-resident lands, and I am happy to assure the public, that he is every way qualified, and can be fully relied on.

ROBERT STUART, Treasurer of Michigan.

Having known Dr. Whiting for many years, I fully concur in the above.

D. GOODMAN, Attorney.

To the above ample testimonials in reference to the capacity, integrity and integrity of Dr. Whiting, I take pleasure in adding my full and cordial concurrence, and heartily concur in the proposal of the proposed Agency.

JOHN A. WELLS, Cashier Farmers & Merchants' Bank.

MULBERRY TREES ON SHARES.

AS there is every prospect that the demand for the finest kinds of Mulberry for silks will be greater next spring than the supply, I now offer to furnish 200,000 very fine trees of the Mour, Elton, Fremont, and Marcella varieties to be cultivated on equal shares, one half the trees to be produced therefrom to be delivered in my order in the spring of 1841. The expense of packing and transportation to be paid by the person ordering them. The packing and delivery to a vessel or Transportation Line, will cost \$2 per hundred, and any person desirous to contract as above, will, on returning \$2 per hundred, receive the trees, with full information with the number he may desire.

WM. R. PRING, Livingston Butte garden and Nursery, Elm Hill, N. Y. April 15th, 1840.

ATKINSON FEMALE SEMINARY.

MRS. ATKINSON, having removed to the city, is prepared to receive a few more scholars, who are admitted as boarders—competent teachers are provided and all branches of study pursued to give a finished education. Parents may rest assured that every attention will be paid to the moral and intellectual improvement of the pupils.

Terms are forty dollars per quarter of 12 weeks, including tuition, board, washing, fuel and light, payable in advance. The following branches are taught: Latin, Greek, French, English, Geography, Greek, Latin, Music and Drawing. Seminary on Canal's east.

May 1st, 1840.

BEEBEE'S STRAW CARRIER.

THE carrier has in use and holds the right in his Patent Straw Carrier, for the counties of Genesee, Livingston, Ontario, Wayne and Orleans, in the State of New York, and in the counties of Huron, Sandusky, and Seneca, in the State of Ohio, all persons wishing the above carrier, may be supplied in Orleans Co., N. Y., by Philip Beman of Caledonia in Genesee Co., N. Y., by Lemuel Condit at Riga Centre, and in the counties of Ontario and Livingston by George C. M. Farn of Seneca, Monroe Co. Those wishing the above machines in any other part of the United States, will please apply to the undersigned. All persons wishing the above machines before the first of October next, will be supplied by rail-road. Carriage and state rights on warehouse terms.

LEAH BEEBEE, Riga, Monroe Co., N. Y.

April 1st, 1840.

RECOMMENDATION FOR THE PATENT STRAW CARRIER.

The said carrier having been used by the Fish Beebe's Patent Straw Carrier, I believe it to be much more as a labor saving machine, it performs the work of separating the straw and chaff from Wheat, Oats and Barley, with the least amount of noise and at cheap rates, and is simple and cheap. Possessing, as we conceive, all those qualities in an eminent degree, we cheerfully recommend it to the public.

Wm. Wakefield, R. H. Moore, Jr., Wheatland, Wm. Smith, Cambridge, Wm. Garstin, Samuel Cook, Wheatland, George Sheffer, Jan. 4th, 1840, William Reed.

The Imported Horse, Alfred.

ALFRED, stand three years this season, 1840, at the following places, viz: At George Furland's, near Geneva, on Saturday, Sunday, and Monday, April 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, and June 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, and July 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, and August 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 24th, 25th, 26th, 27th, 28th, 29th, 30th, and September 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 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NO. 6. { HENRY COLMAN, *Editor.*

MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY
L. WETHERELL, MAY, 1842.

Mean temperature of April,	1812,	45.85	degrees
"	"	1841,	39.87 "
"	"	1849,	47.80 "

Vegetation was considered very forward April 25th.

* This patriotic statesman has reduced his own rent roll 20 per cent, in order to enable his tenants to live under the reduction in the duties on imported provisions.

As to the error respecting the amount of Silk in Massachusetts, I have already written an explanation to the editor of the Silk Agriculturalist, who, believing from the context of my Report there must be a mistake, was so kind as to write me and inquire respect-

ing it. The error arose in reducing the different statements of accounts collected, some in cocoons and some in silk, the latter of which had to be increased, and the time of printing my Report did not allow me to review the computation of the assistant.

As to the wheat crop of Massachusetts, which I have estimated in 1841 at 189,571 bushels, I remark there is only 31,648 bushels more than that of 1839, on which the census of 1840 was taken. The census was taken, you are aware, by persons on oath, and is high authority—the gain, about 16 per cent. in two years, is not incredible, allowing for the increase of population. The bounty too does not apply to any fractions under 15 bushels.

As to the quantity of green stalk per acre, at which you marvel so much, you will find that 5 lbs. per square foot is not an over estimate for the richest land well prepared, in the latitude where the experiment was made, and where the stalk grows much higher than at the north. If you have seen the Baden corn grow at the north, you may well imagine, that if, as you admit, herds grass has produced, when green, 49,837 lbs. per acre, such corn sowed broad-cast, say 5 bushels per acre, and permitted to grow as thick as it will flourish, may yield a crop five times as great as that of the grass. You must not of course expect so much in the short summers at the north, but I carefully weighed the produce of two feet square or four square feet of ground of the stoutest in my field, and the aggregate was 20 pounds, equal to 5 pounds per foot.

The march of improvement is onward, and when you peruse the process of converting pork or lard into oil and stearine, and examine more fully the data on which the statistics are founded, you will be less sceptical as to the early period when you may "throw up your hat."

While the guardians of the Press should sedulously avoid imposing on credulity, it must not be forgotten that it requires strong encouragement and great faith to induce the travellers in a beaten path to take a different one. I will not say that your remarks will have the effect to stifle effort, though the tenor of the remarks is supposed by some to cast an air of ridicule on the experiments mentioned.

Wishing you success in your zealous endeavors in the cause of agriculture, I remain

Yours respectfully,

H. L. ELLSWORTH.

HENRY COLMAN, Rochester, N. Y.

Editorial remarks on the above.

We have much pleasure in presenting to our readers the foregoing letter of the Commissioner of Patents in reply to our strictures upon his late Report. Mr. Ellsworth cannot, we are persuaded, for a moment distrust the high personal respect, which we have for years entertained towards him, and the grateful sentiments with which we have regarded his zealous, disinterested and enlightened efforts for the advancement of an improved Husbandry. We shall add on this subject nothing to what we have already said. We disavow, therefore, every thing personal from the case, and look at the Commissioner's Report as we would look at any other public document of the Government. As such we hold it open, and deem it well for the public and the Department itself, that it should be subjected to fair and honorable criticism. If our remarks have been of a different character, no one will regret it more than ourselves. At present, however, so unconscious are we of any intention of that kind, that we do not see it.

We write these remarks five hundred miles from home, and therefore are unable to recur to Mr. Webb's statement of his process of extracting sugar from corn stalks given in the valuable pamphlet published by the National Agricultural Society, and which will ap-

pear in this number of the Farmer.* We do not impugn any of the statements there made; but we confess we shall wait with some impatience to see those anticipations verified.

The production of 108 tons of corn fodder to an acre is still a matter of surprise to us; not that we doubt Mr. Ellsworth's testimony, but because the amount is so very large. The editor of the New England Farmer has kindly stated to us that the crop of 37 tons, to which he referred, was produced on the place of Daniel Putnam of Danvers, one of the best farmers in Massachusetts, and that in this case three square rods were cut and weighed, in order to determine the amount of the whole crop. He states likewise, that in referring to a product of more than one hundred tons to an acre, he rested on the statement of Mr. Ellsworth. Mr. E.'s result was obtained by measuring and weighing the product of four square feet. In both cases the seed was sown broad-cast. There is always an uncertainty or liability to mistake where the whole crop is determined by the measurement of such small parcels. Here for example is a difference of 71 tons upon an acre between the results obtained by two gentlemen of equal credibility and undoubted truth. Mr. Ellsworth may account for this difference in the different kinds of corn sown, the gourd-seed at the South, the flint corn at the North, the stalks and foliage of the former being much more abundant than the latter. But we understood Mr. Putnam to say that the gourd-seed or southern corn was sown in Danvers, in the case referred to. The difference in latitude or climate would undoubtedly produce a difference in the amount in favor of the South, but to what extent it is not possible for us to determine. When we admitted that Herds Grass, cut green, had produced at the rate of 49,837 lbs. to the acre, we did it upon authority, which is deemed sufficient; but, as will be seen from the form of expression used, not as a matter which ever came within our personal cognizance or experience. But again, upon the supposition that by Mr. Ellsworth's mode of planting, 108 tons of green corn fodder can be produced, it will be seen that the growing crop must cover entirely the whole ground, whereas, on Mr. Webb's plan at least a third of the ground must be left in the open spaces necessary for the cultivation of the crop and for access in order to pluck the ears before their maturity. The product of corn sowed for fodder is undoubtedly much beyond what most persons would apprehend; but how much may be obtained is a matter of such easy ascertainment by every farmer, that we may best leave it to every farmer to determine for himself.

Our remarks on the amount of wheat given in Mr. Ellsworth's statistical tables, as produced in Massachusetts in 1841-2, were designed to show mainly how little reliance can be placed upon statistics of that sort when obtained by estimate, not to say conjecture. An error of 31,000 in a sum of 189,000, does not seem to us a small error; and if proper information had been given to the Commissioner, we believe that the return of wheat produced in Massachusetts in 1841, instead of being increased over that of 1839, would have been diminished, as the cultivation has evidently fallen off since that time. Mr. E. says that his tables give only 31,648 bushels more than was given in 1839, on which the census of 1840 was based. Now we have no disposition to be hypocritical in this case; but there appears some reason to suppose in this instance, that in making out the return for 1841 no reference was had to the returns by the census. The returns by the census for 1840, gave 158,923½ bushels. The returns made to the Massachusetts Secretary's Office in 1838-9, with a view to obtain the bounty, were 108,570½ bushels. The return given by

estimate in the Commissioner's tables are 189,571. Now to any nothing of the extraordinary accuracy of estimating or guessing in such case to a single bushel the whole crop of wheat raised in the state, yet the two numbers, 108,570½ and 189,571, look so nearly alike that we can hardly refrain from the conclusion that the latter is somehow immediately related to the former; and that therefore the clerk, who made out this return in Mr. E.'s tables, did not as Mr. E.'s letter would seem to imply, make it out from the United States Census, but from the return made to the Massachusetts Secretary's office, and wholly as matter of arbitrary conjecture.

The extraordinary error in the tables as to the amount of Silk Cocoons produced in Massachusetts in 1841-2, of 198,432 lbs. instead of 27,219 lbs., Mr. E. accounts for partly in the want of time to review the computation of his assistant. Clerical errors in all numerical calculations are very liable to occur even with the most exact; but this was so large that we can only advise Mr. E.'s assistant to take shelter under the distinguished example of the Secretary of the U. S. Treasury, who we believe in his reports to Congress only made a trifling mistake of one or two millions of dollars. Mr. E. would seem to suggest, that we should have followed the example of the Editor of the Silk Agriculturist, who kindly wrote to inquire if this statement of silk product were not an error, and to whom Mr. E. has furnished an explanation. And this report been a private or personal matter with Mr. E., we should certainly have adopted the same course; but in respect to a public document, published by order of Congress, it might be considered intrusive if not impertinent, if gentlemen requiring explanations or information in such cases, should write private letters to the different heads of departments in order to obtain them.

But our remarks had, we trust Mr. E. will do us the justice to believe, a much higher aim than the correction of a mere clerical error. We deem statistical knowledge of great importance, and Mr. E.'s desire to furnish it in the highest measure honorable to him; but in order to be valuable, statistical statements should rest upon perfectly authentic data; and we wish that Congress should see the necessity of making ample provision for obtaining and publishing them; and not suffer them to be given upon mere vague estimates, nor impose so much duty upon a public officer that he should not have time to review and correct them, nor especially that returns such as those of hemp and flax should be so jumbled together, (the fault of those who took the census) that it could not be determined how much of flax or how much of hemp was raised, nor whether the figures in which the returns are made mean tons of hemp or pounds of flax.

In Mr. E.'s extraordinary anticipations respecting the production of silk, we confess we have no sympathy. We would, as we have done, ardently, constantly, and indefinitely, through good report and evil report, encourage its production as one of the most important agricultural interests of the country; but the calculation of one person in every hundred of the inhabitants of the United States producing annually a hundred pounds of silk, and the product being 18,000,000 pounds, worth 90,000,000 dollars, seems to us pure romance. If "some persons" suppose our remarks in this case adapted to "cast an air of ridicule" on the subject, we apprehend that this "air" belongs to the thing itself and not to the spirit or tenor of our humble observations. The public would suffer far more from encouraging such expectations than from showing their delusiveness. The cause of silk culture has been already put back a quarter of a century by the extravagance of the statements and calculations of those, who called themselves its most ardent friends, and who, with the exception of a few

* See last month's Farmer.

honest and honorable men, were mere gamblers in nursery trees and speculators upon the public credulity. So it is likely to be in respect to other agricultural improvements. We must not expect to reach the goal at which centuries have aimed by a single leap. The public mind by great pain-taking has just come to that healthy state in which it begins to take an interest and find a rich pleasure in agricultural inquiry; and the ignorant are ceasing to sneer at book-farming and have become willing to read and to listen. They need now to be nourished by the calm and reasonable statement of facts and experiments; but to approach them now with mere discursive calculations, and promises so extravagant that they transcend all reasonable expectations and experience, will only create disappointment and disgust, and essentially injure the great cause, which many of the best and most intelligent minds of the community have so much at heart.

There is a great deal of valuable matter in the report besides that to which we have referred, of which we shall hereafter avail ourselves.

To Correspondents.—Post Office and Postage.

We do not agree with our respected friend from Cayuga, that the decision of the Post Master is wrong in regard to endorsing newspapers. If "A. B.'s compliments to C. D." mean nothing, then the writer cannot complain that he is not allowed to put them on the paper. But they mean a good deal; they signify the good will of the person who writes; his kind remembrance; that the paper comes from him; and would be understood generally to imply that the writer was well, and invited attention particularly to something in the paper. If it was lawful to put so much, why should it not be lawful to put compliments also, to E. F., and G. H., and so on, inserting as many tender messages as you please to the mistress of the household, and so through all the aunts and cousins down to Boots and Betty, the scrub. The mail is designed for the general accommodation and comfort; for the aid of business and commerce, the diffusion of intelligence, and the maintenance of social intercourse, the great charm of life. Every man or woman, therefore, who in any respect whatever avails himself of its advantages, should be willing to pay for those advantages, and not attempt to evade their obligation by any sort of skulking whatever.

Then we think it the imperative duty of the Government to render this form of communication as rapid, as certain, as diffusive, and as cheap as possible. We therefore protest against the late proposition of the Post Master General to increase the 18 3/4 cent postage to 20 cents. If the present extension of mail conveyances and facilities are not sufficient for the demands of the country, then let the Government make them so. If the income of the office is not sufficient to meet the expenses, supply it from other sources, if we are ever likely again to have any thing to give. Let the public accommodation in this matter be the first object. The rates of postage are already much too high. Reduce your 25 cent postage to 12 1/2 and your 18 3/4 to 10 cents, and your 12 1/2 and all others to 5 cents, and there can be very little doubt that the revenue of the Post Office would be greatly increased. Then put an entire stop to the franking privilege excepting in the Great Departments of Government, and the health of this great concern now complained of as "in a poor way and very much inclined to consumption," would be speedily restored. Such a change would greatly multiply the epistolary correspondence of the country; and the unfortunate individuals, who are just taking their departure at the great points in steamboats and cars, would not be dunned with, "Sir, I was too late for the mail, (nine times out of ten a lie) will you take a letter?" and then find themselves regularly transformed into U. S. Mail bags. Twenty and thirty letters, as we know by experience, are not an uncommon num-

ber to be offered to one individual, because the writers "unfortunately missed the mail."

We believe as much as we live, if all postages of single letters were reduced to ten or even six cents, and double letters to fifteen cents and five for every additional sheet for any distance, and the payment of this postage always required when the letter is deposited or rather stamps purchased, and the franking privilege abolished or much limited, the revenue of the Department would be essentially increased, and sufficient for the purposes of the country.

Post Office and Postage.

[In a letter from Cayuga County.]

How could we live if the mail was stopped, and the post office closed? Yet I well remember when in a populous neighborhood of another state, scarcely any person thought of visiting the post office, if such a place was even known. "How did you get letters?" By private conveyance. "And your newspapers?" From the printing office in the city, at the distance of twenty-five miles.

Within the present century, *Scipio P. O.* was kept in the village of Aurora. It was called so, because it was the only office of the kind in that old town, though the population even at that time was great. When wheat was carried to Albany in sleighs at a cost of 75 cents a bushel, money was hard to get, and postoffice bills not so easily paid as at present. Letters and papers were luxuries that but few persons could well afford, to much extent. Now there are seven post offices within the limits of that old town, on the two stage roads between Auburn and Ithaca, besides four more at least which are kept in the eastern parts of the district.

These notes are intended to show the general and increasing interest that is felt in the Post Office Department, an establishment which necessarily requires millions for its support. This revenue is derived chiefly from a tax upon letters. With a liberality adapted to republican institutions, newspapers weighing several times as much as a letter that is charged twenty-five cents, are carried throughout the whole length of the United States for one cent and a half—so we may all be politicians.

This liberality however, is not met in all cases in a proper spirit by our citizens. Under the shelter of a newspaper, many contrive to send intelligence which ought to be subject to letter postage, and which is subject to it when found out. Honorable, upright minds however, that have reflected on the matter, will refrain from such practices; and be willing to bear their proper proportion of the burdens imposed by the Government.

The law of Congress requires the postmaster when any thing is written on a newspaper, which amounts to a memorandum, to charge letter postage for it, and if the receiver will not pay it, the paper is sent back, and the writer subjected to a fine of five dollars. All laws of this nature, leave much discretionary power with the Heads of Departments, and it is very desirable that they should receive a liberal interpretation. It is very desirable that whenever a citizen is mulcted, that both he and the community should be satisfied that the intent and meaning of the law, as well as the public welfare, required it to be done.

When a person writes a letter on a newspaper, or transfers a letter already written to a newspaper, by dotting or underscoring a printed word for each written word, as they occur in succession,—it is clearly an attempt to evade the law, and to wrong the Department of its just dues. No candid person can say a word in defence of such practice, and it ought to be discountenanced by every good citizen. When the penalty of the law overtakes such offenders after due warning, it is a just punishment; and the hands of the postmaster ought to be strengthened to perform the duty.

In my judgment however, it is a different affair when

the Post Master General construes a memorandum to mean any thing that is written on a newspaper besides the direction. For instance: If a person sends a newspaper with his name on it, to indicate whence it came, ought it to be considered an offence? But I will go one step further: suppose he writes on the margin "A. B.'s compliments to C. D.," and no more, would a liberal construction of the law make it an offence? It is equivalent to the simplest act of recognition when we meet a passenger in the road. Not a word is spoken in one case, nor an additional word in the other. It wrongs the Department out of nothing, for no man would write a letter for the purpose of saying no more than that. He communicates no more intelligence than the man who silently touches his hat.

But the Post Master General has the power to say that a compliment so written and so sent shall subject the receiver to letter postage, or the writer to a fine of five dollars; and out of

'Respect for his high place!'

I would on no occasion offend him in this particular; but it is bad policy for an officer to strain his authority.

Home League—Protective Tariff.

Those who take but a superficial view of trade and its ramifications, are very apt to hail a protective tariff as the only panacea to bring back a healthy, prosperous trade to the nation.

My experience goes to prove that the pecuniary ills we now suffer, are by no means chargeable to a diminution of tariff under the compromise act, but rather to the abuse of the credit system. Now my agricultural friends, I appeal to your experience in relation to the credit system; have you not seen at a farmer's vendue, cows, horses, oxen, and all implements of husbandry, sold 50 per cent. higher on a credit of 12 months, than they would bring in cash? The same extra price for credit will apply to all our imported goods. When we can pay England with paper promises, we always buy too much, hence the outcry for a tariff to stop the overtrade; but when we have to pay specie for goods, the check to excessive importation is sufficient, without an extra tariff.

As long as England would take our State Stocks and United States Bank Stocks at par, our banks discounted freely and our imports were excessive; but now when these paper credits have exploded, and we must pay specie for the excess of our imports over our exports, the necessity of a protective tariff is done away.

If I was asked what was the leading cause of the present money pressure, I should say it was the depreciation in State Stocks, they no longer being available in England at any price. Six millions of specie had to go forward last fall to pay for goods, which at other times had been paid for in scrip; this brought our specie paying banks to their marrow bones. Had England continued to take scrip, there would have been no present panic, but our debt to her would soon have been so large, that our export of cotton and tobacco to Great Britain, would hardly have paid the interest of it. If I mistake not, this failure of our credit is a better protection against British manufactures, than 50 per cent. increase in our tariff. Hence my doctrine is, let us have a tariff for revenue only, but let it be imposed with such discrimination as will protect those branches of our manufactures that most need it, while it promotes free trade with those nations who take exclusively the products of our industry in payment for their productions.

To say the least of the evil of a protective tariff, its tendency to inflation is inevitable; ruinous competition and reaction must follow—the extravagant habits it entails upon community palsies all the humble charities of social life, and brings economy and self-denial to shame.

OLD HUMPHREY OF THE GENESSEE.

Candles from Castor Oil.

[Extract of a letter from Hillsboro', Illinois.]

"I wish it was in my power to give you some information in regard to the manufacture of Candles from Castor Oil, which I notice you ask for in a late Farmer. I have made many inquiries about them and learn on good authority, that they burn a little longer than sperm candles, give quite as good a light, and are harder; also that when the beans are worth one dollar per bushel, the candles can be furnished at 25 cents per pound. Our farmers are quite content with a dollar per bushel for the beans, which is the price they have borne for a number of years. Although the last season was so dry, beans about us produced well, giving as much as twenty bushels from an acre; and as they were the only article which brought money readily, every one was on tip-toe for raising them. One man, I heard of, who had never raised one in his life, or even seen them raised, was going to plant a hundred and fifty acres with them. The price of oil being reduced from one dollar to twenty five cents per gallon, has very much allayed this bean fever which began to rage."

This certainly promises to be a profitable article of cultivation. The beans are planted in rows, and require only a clean cultivation; but we do not feel sufficiently acquainted with the culture to give specific directions. We rejoice in every new production of articles of use, necessity, or comfort. True independence consists in the power of supplying our own wants from our own resources; and the best of all rules in domestic economy is for the farmer to obtain from his own farm, every article of necessity, which the farm can be made to yield. With the encouraging prospect of oil and candles from corn, lord, and the castor bean, there is some reasonable chance that the sovereignty of the ocean may be again surrendered to the king of fishes.

Culture of the Cucumber.

We know nothing of the advantage or utility of the method of cultivating Cucumbers recommended below, but give it on the credit of our correspondent. On a small scale, if effectual, it is an easy way of getting rid of the enemy, to send them out with perfumes. An old and eminent physician in Boston used to recommend as the best preparation of cucumbers for the table, to cut them in thin slices, salt and pepper them well, apply a sufficient quantity of the best wine vinegar, and then throw them out of the window. We know the favoritism with which many persons regard them, but we never see a plate of them on the table without at least thinking of the Cholera. We have known some persons who preferred to eat them after they became, as they termed it, dead ripe, and as yellow as a custard pudding. In this way they were not quite as likely to irritate the teeth as crackling walnuts.

Mr. Esprit—I wish you to publish the following, written by Mr. James L. Enos, if you have room in your valuable paper.

O. O. O.

Culture of the Cucumber, by James L. Enos.

"The best and most sure way to raise cucumbers, is to dig holes in the ground about one foot in depth at the distance required for the hills, then fill these holes nearly full of leached ashes; cover them over with about one inch of fine light earth, sow on your seed, (but not until your land is dry and your seed well soaked in warm water or milk,) and cover it over lightly with fine dirt.

"The ashes will prevent the worms from eating the seeds or the young vines. As soon as the leaves begin to start, and the striped bug begins to eat the leaves, go and pick a handful of Tansy and lay two or three spears around in each hill, they will soon move off for some other place and will not trouble you any more. Hoe them three or four times, as necessity requires.

Try this manner of procedure and reap your rich reward."

East China, Wyoming Co., May 3, 1842.

Western Manners.

Extract from a private letter from a friend at the West.

"We are very much pleased with our nearest neighbor, Mr. ———. They visit us often and treat us with much kindness and attention. His family consists of eight daughters, the oldest 19 years of age, good, substantial girls, who ask no odds in knitting, spinning, weaving, milking and housework. When planting comes, they take the field, armed with their hoes, and go right ahead without any parol or shoes."

There's for you! Look here, young men! we were about to say; but the truth is that there is scarcely one young man in twenty among us, a parcel of dandified, sugar-smoking, watch-chain-sporting, whiskered and mustachioed monkeys, there is hardly one in twenty that has even the shadow of a claim to such a blessing from Heaven as one of these eight girls must be to any industrious, clever fellow, whose only capital is his hands, and who wishes to get an honest living by his own labor. Such a wife would be a fortune in itself; and such a man had better have one such wife than to marry a whole boarding school of your nanby pambly, silky-milky trash, that too often passes under the name of accomplished; poor irresponsible butterlies! who pretend to faint at the sight of a cow as though it were some foreign wild beast escaped from a travelling menagerie, and, dear souls! don't know whether the milk comes out of the udder or the horns. What are such women good for, excepting to put in a glass case, like a beautiful piece of alabaster statuary, to ornament a mantel piece or a china closet; we mean so far as concerns getting a living, taking care of a family, or the honest accumulation of wealth. We acknowledge, old and new as we have grown, that some of them are as pretty as the sweet fairy humming birds, the embodiment of every thing that is beautiful and poetic in form and motion, that haunt the flower-garden at the close of the day, receding and imparting an exquisite delight; but to what substantial use can such things be put? Now we don't object to accomplishments, the most intellectual and the most polite accomplishments; but we maintain that there is no incompatibility between physical labor and intellectual labor; that the exertion and increase of the physical strengthens the intellectual powers; that a woman ought to understand as well the use of her hands and her limbs as of her mind; that no human being, unless in case of disease or deformity, is justified in living without some useful labor; that while we should feel as adverse as possible to subjecting women to any severe and degrading toil, we think that there are many kinds of out-door labor on a farm, which women might perform in company with their fathers and brethren, with signal advantage and improvement to their health and persons, provided only that they will lay aside their iron armor. In this age so preeminent for its trippery and foppiness in education and manners, it is quite a relief to find one sensible man, who knows how to bring them up, filled with eight daughters to bring up. We have heard much of late years of the want of girls at the West. But if this account is at all a fair indication of the state of things there, the demand will soon be supplied by the home growth; and if our own girls in these high tariff times will allow us to say it, we must either produce a better article among ourselves, or be permitted to import from the West duty free. But we begin to be alarmed at our own tenacity in so much as hinting these things; and as the almanac makers say, running down a whole page, we shall "look out for a storm about these days."

The passions are good servants but terrible masters.

Western Adjuncts and Contrasts.

Extracts from a letter from the West.—"I wish you could spend a month with us now. I don't think our place would seem so foreign and out of humanity's reach as it did when you was here; travelling will soon be so cheap that you can bring ——— with you. (Heaven forbid that we should ever venture again without our baggage!) Our nearest neighbor has large orchards of apple, peach and cherry trees. I put four acres in wheat last fall, which is now looking finely; this spring I have sowed five acres with oats; and just finished eight acres for corn and three for castor oil beans; if the weather continues favorable, I intend to plant ten acres more in corn."

This is certainly all bright and beautiful, and we are sorry that there should be a cloud even so big as a man's hand in this western sky but what earthly draught is unmixed; so we read farther on,

"C ——— has not had any fever and ague for a long time and seems to think he has got rid of it. Mr. H ——— has had the fever and ague pretty bad this spring—'he is better now'—&c. &c.

We shall add nothing about the currency or money ague, which has been upon them for some time; and in respect to which they are, we believe, past the shaking and have actually become stiff. When 45 cents per bushel, Pork 1½ cent per pound, Corn 10 cents per bushel, and no money; so as *en Ohio* farmer informed us it required only eighty bushels of corn to buy one pair of boots. But then all such luxuries may be dispensed with, as there are no stones upon the prairies; and they are every where carpeted with flowers.

Sale of Mr. Weddle's Stock, on the 29th and 30th of March.

We were prevented from attending this sale, but a friend has furnished us the following account of the prices and purchasers.

Cow Gazelle, 4 years old, sired by Rover, to John B. Dill, Auburn, \$500.

Cow Hebe, 2 years old, by American Comet, J. M. Sherwood, Auburn, \$500.

Lucilla, 1 year old, by American Comet, to Calvin Ward, Bristol, \$260.

Matilda, 1 year old, to Geo. Hentig, Geneva, \$100.

Bull American Comet, to Geo. Hentig, Geneva, \$325.

About thirty Cows, half and three quarter blooded, sold from 25 to 55 dollars each.

About twenty-five Heifers, two years old, sold for from 20 to 30 dollars each.

About thirty Calves and Yearlings, with other young stock of various grades, sold at an average of about 15 dollars each.

Stud Colt, 3 years old, sired by imported Turk, to J. Clark, \$500.

Stud Colt, 3 years old, sired by imported Turk, to T. Weddle, \$325.

Stud Colt, 3 years old, sired by imported Turk, to H. Paddock, \$225.

1 Mare, 10 years old, to G. Ferdon, \$120.

1 do. 6 years old, to G. S. Rappley, \$110.

1 do. 4 years old, by Alford, to G. S. Rappley, \$152.50.

1 Span of Mares, 6 and 8 years old, to G. Hentig, \$312.

About 30 Leicester Bucks and Ewes, sold for from 5 to 20 dollars each.

Some fine flocks of half and three quarters blooded Ewes and Wethers, brought from \$3 to \$3.50 each.

Shipment of Improved Stock to Canada.

The steamboat America, on the 16th ult., took on board at this place a fine three year old stud colt, bred by Thos. Weddle, and sired by his imported horse Turk. Also, a very fine Durham bull, 2 years old, and a Durham calf, all purchased of Mr. Weddle, for the Northumberland Agricultural Society, by two gentlemen sent over for that purpose.

To Correspondents.--Bee Management.

W. S. T. on the Management of Bees invites the attention of our readers to a small but important subject, and one intimately connected with household economy. We agree with him in his estimation of the value of the Vermont Patent Hive, by John M. Weeks, and we know no better book of the size, indeed none so good, as that of Mr. Weeks on the whole management of Bees, two or three editions of which have been published. We have on hand a manuscript communication from Mr. Weeks on the subject of bees, and one from another friend J. V. C. S., which we shall presently give to our readers. John Sholl, of the city of New York, a member of the Society of Friends, is likewise the inventor of a Hive, made from a flour barrel, and which may be suspended any where; of an excellent construction, furnishing facilities for obtaining the surplus honey at pleasure, preserving an equable temperature in the hive both winter and summer, and almost absolutely effectual against the entrance of the Miller. We design to have in our office at Rochester, for the gratification of those interested, a model of Weeks' and Sholl's Hives. Thatcher's and Griffith's Hives are likewise good models; and all go upon the principle of not "muzzling the ox that treadeth out the corn," and abandon the old atrocious system of Algerine Piracy, first to murder and then rob.

An excellent Hive, Beard's, has likewise been invented in Maine, which we know only from the recommendation of others, but which we mean to inspect the first opportunity. We learnt the fact of a single individual having sold the summer before the last to the value of more than one thousand dollars in Honey and Bees. This is more than many farmers, even in Western New York, obtain for their year's crop of wheat. We found in Vermont last summer, on one farm a stock of one hundred and twenty-five hives. This bee-master gave a decided preference to Weeks' Patent Hive over every other, that he had seen.

Nutt's English Hive is a beautiful erection; highly ornamental in a garden or orchard; and combining in an eminent degree all the desirable properties. The Bee Houses, as they are called, and the keeping of bees in garrets, have generally failed after two or three years, some through the ravages of the moth and some for other reasons.

Management of Bees.

MR. COLMAN--Having been a reader of the New Genesee Farmer for about two years past, I have as yet seen very little written upon the management of the honey bee. Feeling an interest in this subject, I send you a few brief hints as to the best mode of protecting the honey bee from the moths, that they may not destroy their useful works. The farmers in this vicinity, at an early day, kept bees to good success. Of late years the millers have become so troublesome that it is almost impossible to keep bees. More care and attention are required now at the present day to keep bees, than when the country was new. A few years ago, many farmers in this section tried, by way of experiment, small houses for the honey bee; but this was not an effectual protection, the moth soon got possession of the building and destroyed them. The common hive is better than such buildings if set in proper places and taken good care of. The best hive in use, is, in my opinion, the patent hive invented by John M. Weeks of Vermont. In order for us to keep bees as formerly, we must obtain this new patent hive, and give our leisure moments to the care of them. The moths and millers are more prevalent now than formerly. It is therefore highly desirable to obtain a hive that will be a preventive against the moth. With proper exertions we can, in my opinion, keep bees now as well as formerly. The patent hive

is preferred to any other for this reason, that we can obtain the sweets of life at any time without killing the bees. There seems to be great cruelty in killing such industrious creatures. The patent hive is not much used in this section, but the time is not far distant when it will be the only hive in use. As soon as farmers make a trial of them, they will abandon the common hive. The common hive will answer very well in a new country, where the moths are not so prevalent. The great difficulty in keeping bees in this country, is in the moths and millers obtaining possession of the hive, and thus destroying those ingenious fabrications which are beyond the power and wisdom of man to construct. I shall continue my views upon this subject hereafter.

South Venice, 1842.

W. S. T.

For the New Genesee Farmer.

MR. COLMAN--If there are any evils which require philosophy to support them, we think those of an editor among the number. And if question asking is to be ranked among these evils, we think as the thirst of knowledge is being more and more excited in the feverish mind of man, these evils must continue to increase until the fountains of knowledge are widely opened. There is no way to open these fountains only for every one to put forth a helping hand. We must have our Davids in the field as well as our Goliaths; and if the stature and strength of the former falls far short of those of the latter, the good will manifested, will in some measure compensate for the deed.

We have noticed with some sympathy, the dilemma in which you are placed by the catechising part of your subscribers. Why sir, if you had as many pens as you have fingers and should keep them in constant practice, you could not stop the clamors of this enquiring truth seeking age. Prompted by these reflections, I have sent you my mite, hoping in a particular or two to relieve you from embarrassment in which you are placed. In answer then, to the enquiry of your Connecticut River correspondent, respecting bees, permit me to reply.

That the best way to keep bees through the winter, is to keep them cool, dry and dark. This may be accomplished in various ways. We have buried them with good success. But the season must favor this operation, or it will not succeed so well. In open winters like the past, we should not approve of this course, for by the frequent thawings of the earth, they are liable to get wet, mould and die. The best success attends burying, when the ground freezes immediately over the hive and remains frozen until Spring. In winters like the past, keep them in a cool, dark room, where the storms will be entirely excluded from them. In such places they will be likely to remain dormant, which is much in their favor.

Summer management. Salt your bees as often as once a week; if oftener better. Water them at some pure stream every day. Now friend of Connecticut River, we are not boxing you. Bees entail. Its qualities are also anti-moth. If a little remains around your hives, it will help you to guard against these pestiferous animals. Though your bees may sometimes be rather obstinate about driving to water, yet rest assured, that if you locate your apiary near a good fresh stream or pool, as you should do, they will soon find the way to it themselves, after which, you will have no trouble of driving, for when found, they know and appreciate the excellency of its cooling and cleansing qualities as fully as the most fastidious of our own species. Let their hives, also, be in a cool and quiet place, not so near the highway as to endanger the horses of passers by on a sultry day, for such a rencontre would not only be fraught with dangerous consequences to your neighbor and his beast, but to themselves also. Allow the visitors at your place

to ask such questions as they please with regard to their prosperity, but do not allow them to run among your hives, lifting up this and drumming on that, for the little warriors will be aroused if you do, and very likely punish you for "allowing liberties to be taken with them." Keep cool when you go among them; they like system, and to have every thing done at the right time and in a right way.

At swarming time, in particular use discretion, and do not be in a hurry. If you wish to blow tin horns or drum on old pans for your own amusement when they are rising, you can do it, but they will pay but little regard to such ceremonies. The Shakers in New Lebanon, who are the best bee managers we know of, have nothing to do with this flummery. They set a shaker hat on a pole some four or five feet high, (probably the hat of their chief attendant, which they will know as quick as a dog will the back of his master,) and the swarms frequently alight upon it. These people have the confidence of their bee community so much that they handle them with as much indifference as they would flies. Bees are susceptible of right and wrong in their transactions with the bee keeper, and appreciate kindness as fully, as some at least, of our own species.

Do not over stock your premises. It is necessary that there should be labor enough for the hands to keep them all busy. In this way they will keep in health, and when a strong vigorous swarm exists, there is but little danger of invasion by enemies.

Cultivate flowers, especially the white clover, a beautiful plant, which is very ornamental to high-ways and pastures. If your bees do not derive sufficient benefit from it to compensate you for your pains, perhaps your cows will. Cat mint is also a favorable plant with them, not for its medical properties, for industry gives them health, but for the honey they extract from it. The currant, gooseberry and raspberry are also valuable for them. So is Mignonne one of the prettiest little flowers of the garden and long in bloom. Set the plants two feet asunder and it will occupy all the ground.

W. B.

Mount Oscola, 1842.

Naked Barley.--A Substitute for Wheat.

MR. COLMAN--In a late number of your paper I observed a notice of a new kind of barley called "Pearl Barley of the West," which was grown last season in some part of Michigan. The same kind of grain, I presume, has been cultivated for two or three years in this vicinity; and the notice above alluded to reminded me of a beautiful crop of it which I saw growing last summer upon the farm of Mr. Walter Gillespie, a successful and enterprising farmer in this town. Subsequently I made inquiries respecting it, and I subjoin the information gathered from him.

This barley is six rowed, and resembles very much while growing the common six rowed barley; it is a naked barley, the grain threshing out clean from the husk or hull like wheat; the berry is about the colour of the red chaff wheat, but in shape somewhat longer. The quantity of ground sown was about two acres in an orchard; soil a light sandy loam; the previous crop was barley of the common kind, the stubble of which was plowed under, the seed sown upon the furrow and harrowed in. Three bushels of seed were used; the crop was mowed and gathered up in the same way as hay; and when threshed and cleaned it measured a little over fifty bushels, and weighed sixty five pounds to the bushel. Mr. G. has had some of it ground and bolted, the flour was very fine and white, more so than that from our best winter wheat; indeed the miller stated that by these two peculiar properties only, could it be distinguished from superfine wheat flour. The bread made from it was whiter than wheat bread, and would not be suspected as being

any thing else by the taste. I have heard but one objection made to this grain here, and that is the difficulty of threshing it—from its adhering so firmly to the straw. But this objection will not have much weight with a good farmer, for what is not separated adds to the value of the straw by making it more palatable to his stock, by whom it is devoured with great avidity, and thus goes to a good account not only in the improvement of their condition, but also as a substitute, and a cheap one too, for hay. But my object in calling your attention and that of your readers, and more particularly those of New England to this grain, is to suggest to them the cultivation and use of it as a good substitute for wheat, if it should prove, as I think it will, a cere crop on such soils as are not adapted to the latter. And as the seed can now be procured for about the price of common barley, and the expense of cultivation would not be great, I would respectfully recommend to my brother farmers "down east" to make a trial of it, and give the result through the columns of your paper.

Mr. Editor, I am a plain practical farmer,—one of your straight forward, every day sort—having always the scare of that most ancient and honorable occupation upon the palms of my hands. And I would here like to say, not only to you but also to your host of readers, that when you see a communication with my name attached to it, you must not expect to find it written in a smooth, flowing, finished style, with a studied degree of perspicuity and elegance, according to all the rules of silk glove husbandry. But you will rather find it plain, off-hand, farmer-like; using as much as possible the manner and the terms of an every day conversation between farmers. And I cannot but hope that you will grant me your forbearance and forgiveness, if I do occasionally

"Knock pronouns, nouns and verbs about,

Put adverbs in a hurry;

Run interjections out of breath,

Conjunctions bury quick;

To the real death of Dikwot, Dyke, Horne Tooke and Lindley Murray."

J. HORSTFIELD.

Castile, Wyoming Co., N. Y.

[We are always glad to hear from our friend Horstfield. We like his plainness, frankness and spirit. If he does not write good grammar, we have not discovered it. We know what he means; and that is all we want to know.]

The Naked Barley of which he speaks, or as some call it the Wheat Barley, is not unknown at the East. We have seen it repeatedly, and in one instance we knew a trader to take it in for a new species of wheat. But whoever eats wheat bread and barley bread near together, will not be at a loss for the difference. The difficulty of threshing is not of much consideration. The grain deserves cultivation and makes good bread when warm, if the bread-maker does her duty. By Davy's tables, barley meal contains a large proportion of nutritive matter; being 920 parts in 1000, viz.—790 of mucilage or starch, 70 of sugar, and 60 of gluten. It is highly nutritious when mixed for cattle and swine. —Editor.]

Value of Agricultural Knowledge.--Rolling Land.

MR. COLMAN.—Having been a constant reader of the *Genesee Farmer* since its first publication, I have been interested and have found it profitable to practice in accordance with its recommendations.

I have also been much assisted in the arrangement of my farm, in preparing the soil for different crops, and in determining what kinds of grain will follow each other with success, by the experience and experiments of brother farmers, as made known through your valuable paper.

This is an age of experiments, and this accounts

for the valuable improvements in agriculture made at the present day. If I understand the character of your paper, in it there is a door opened through which farmers (though living in different parts of the state or of the United States) may, as it were, meet in one general delegation and confer together, by relating the results of our experience and the improvements we have made in the culture of the soil. By taking advantage of the privilege you set before us, the improvement made by different farmers in agriculture, will not only benefit themselves individually, but the whole mass of farmers who wish to become enlightened and profited by the great improvements of the day.

I am fully sensible, that the influence of the light and truth, now being disseminated throughout our country by the means of agricultural periodicals, is what the farming interest has long needed. Through these means we have the assurance of great and lasting blessings to the farming community; and in the same ratio that they are blessed the whole of mankind is benefited. Your paper, with others of a kindred spirit, is exerting an influence through which the country fellow, as he is sometimes called in derision, is to be elevated to a man among men, to his proper standing and character in the community.

Farming has had my attention and labor from my youth, and as I have endeavored to influence farmers to speak through your paper to other farmers, I would not be behind hand, though I have nothing remarkable to communicate. I would say one word as to the practice of rolling land.

This practice is beneficial in most cases, especially on a loose soil, and especially so when we sowed down land with spring crops. By rolling land after the grass seed is sown, it compacts the earth around the seed without covering it so deeply that it cannot come up; it assists the earth to retain its moisture; the seed sooner sprouts and comes up, and the drought does not so readily destroy it.

I sowed a field of nine acres to clover with oats last spring, rolled it with a heavy roller, and the seed took well and looks finely, whilst most other pieces in this neighborhood were cut off by the drought. It was also beneficial to the oat crop. It was a field upon which I had raised five successive spring crops; five acres of the nine had never been manured, the rest not heavily.

I sowed upon the nine acres 30 bushels of seed; they stood up well when I harvested them. I threshed them the last winter and had 575 bushels, weighing 34 lbs. to the bushel, averaging about 64 bushels per acre.

Land should always, if possible, be dry when it is rolled; then it does not make the earth hard and impenetrable to moisture.

Yours with respect,

JUSTUS TOWNSEND.

Ira, March 26th, 1842.

[The above crops must be deemed large, and Mr. Townsend's experience of the value of a roller on his farm, is fully confirmed by the experience of every other farmer, who has judiciously used one. No farmer should think of being without a roller hardly more than he would think of being without a plough; that is a roller should be considered as absolutely indispensable. —Editor.]

An Apology for not Advocating High Tariff Restrictions.

I was somewhat surprised to learn that my January article on Tariff and Home League, was regarded by a subscriber and his friend as evidence of a want of patriotism in the writer; the more especially as I have ever advocated in the columns of the *Farmer*, the importance of fostering domestic industry, and building up a home trade as a certain market for the farmer, a

hold of hope, ten fold more sure and steadfast, than all the foreign demand of all the world besides. The subject most certainly demands the freest discussion and inquiry, and if I mistake not, the great bulk of the candid and inquisitive rural readers of the *New Genesee Farmer* at least, are not averse to that free discussion on the subject of national economy, which alone can keep us as a people, intelligent and free. I have supposed that every farmer wants to know why the times are so out of joint, and if I give him my simple opinion of the causes as I understand them, or by virtue of my poor experience, I hope he will not arraign my patriotism, for I love my country in these last days of her gambling excesses, as a mother loves her long lost prodigal son.

The theory of a protective tariff and retaliatory duties, recommends itself directly to the feelings of the superficial observer, and he becomes averse to listen to the detail of such facts as may overthrow his long fortified position. The restrictive policy of England is cited by high tariff advocates, at one time as an example for us to follow, and at another time as giving necessary cause on our part for the enactment of counteracting restrictions. But when we reflect that the restrictive policy of England has grown with her growth, until such is the fearful fictitious state of her civilization, that free trade would at this time only compass her utter desolation; ought we not to pause before we follow the example of England in her career of high tariff restrictions; at least to the extent which is proposed by the high tariff advocates of the present day.

A cold damp climate, a contracted territory, and a dense pent up population, present the excuse of stern necessity for Great Britain. But with our extended country, all producing soil and sparse population, we are reduced to no such hard alternative. Counteracting restrictions would only aggravate the ills we suffer. Can it for a moment be supposed that England will ever cease to stimulate her agriculture to its highest point of production, when that agriculture as it is, only can enable her to exist in time of war, to maintain her political integrity, and feed her masses independent of aid from without? Will a nation whose enormous home trade is little less than £400,000,000 sterling consent to prostrate the great supporting interest of that home trade, in order to encourage a trade of a few extra millions with us? I think not.

Why is it that New England, the great workshop of the union has never advocated a high tariff? because her sound laws have kept her currency sound; while Pennsylvania, a state with a population equally frugal and industrious, is crying out in the dark hour of her distress for a tariff, thus vainly hoping to cure the evils of a legalised depreciated currency, by a collateral inflation.

I am in favor of a tariff ample for the purposes of revenue, framed with such discrimination as will favor both revenue and protection to our home industry. Any higher tariff than this cannot fail to be disastrous to the three great interests of the nation, agriculture, commerce, and manufactures.

Waterloo, March, 1842.

S. W.

Envy.—Envy ought, in strict truth, to have no place whatever allowed it in the heart of man,—for the goods of this present world are so vile and low, that they are beneath it; and those of the future world are so vast and exalted, that they are above it. —Lacan.

Workmen should be especially careful to treat each other with urbanity, and politeness. They will always feel better for it and command the respect of others. Politeness is what every man owes to every other man, be he acknowledges worthy of respect. —Elerator.



ROCHESTER, JUNE, 1842.

Acknowledgements to Correspondents.

Cast Iron Sun Dial.—We acknowledge with pleasure an Iron Sun Dial from Sheldon Moore of Kensington, Conn. It is well cast and neatly graduated, and may be confidently recommended to farmers, who now go by a 12 o'clock mark, and some of whose wooden clocks from the land of steady habits are quite sure to be right twice in twenty-four hours, because they politely wait for the hour to come up to them. Heaven sends to man no more beneficent monitors than those which mark the flight of hours. They seem sometimes very unseasonable and often sad, but always useful counsellors.

Subsoil Ploughing.—S. A. inquires what is subsoil ploughing, and if it is any thing more than ploughing a field deeper than it was ever ploughed before? Subsoil ploughing consists first in making a furrow with a common plough, say six or seven inches deep, and then following in the same furrow with a plough constructed for the purpose without a mould board, which shall effectually loose the ground eight or ten inches deeper without bringing it upon the surface. By this process, especially connected with a thorough system of under ground draining, the whole land being loosened to a depth of sixteen or eighteen inches, all superfluous moisture is carried off, air and warmth are admitted into the soil, by which vegetation is greatly advanced, the roots of the plants more easily extend themselves, and portions of the lower soil being gradually brought to the surface, the whole becomes by degrees enriched under the action of the atmosphere, and by cultivation.

Remedy for Heated Cattle.—S. A. recommends when an ox suffers by heat, to throw salt down his throat at the rate of a pint per day, and to do this day after day, until the ox has quit complaining. This would be effectual without doubt; but would it not be quite as well to salt him regularly in the barrel? This giving a sick animal medicine until he has done complaining reminds us of the practice of some physicians, (Quack doctors beyond all doubt and none of the Medical Society,) who succeed in stopping all complaints but those of the heirs of their patients when their bill comes to be presented. It is somewhat akin to De Foe's *Short Method with the Dissenters*, recommended to the dignitaries of the established church, which advised to hang them all.

Social Evils.—The communication of Veritas upon Social Evils is under advisement. Her politeness is respectfully acknowledged. Her views are strong; in the main just; but if she gives us a third specimen of her quality after this fashion, we shall set her down as an arrant scold; the last thing that would ever come into our heads; when we look in her face and hear the natural tones of her gentle and musical voice. She charges us with deficiency of hope and want of trust in Providence. We have trusted in Providence all our lives, but still don't find things come out just as we would like to have them. The reason, we believe, is that our views do not exactly accord with those of Providence. Had we made the world we would have had no storms, no night, no sickness, no sin, no suffering, no death. But Providence permits all these things, which we call evils. Many people often ask us, can't you trust in Providence to put an end to war, and slavery, and drunkenness, and oppression? We could, if Providence would regulate its measures by our con-

coited wisdom; but what folly and presumption and madness to expect this! As these things have been suffered to prevail ever since man was created, experience certainly gives us no reason to suppose that they will not continue as long as man continues to exist. We will contend against existing evils as long as we can and with what little strength we have, and be thankful when the sun breaks through the thick cloud and cheers us with a spot of light, if no bigger than the palm of our hands; but we confess, after the experience of more than half a century, it is almost hope against hope, and is somewhat like a man's venturing into the rapids of Niagara. If by chance he gets back with his life, he is sure to come out dripping and bruised; but he is most likely to be carried down by the torrent, which seems destined to flow on, who can say how long, in all its violence, turmoil and frenzy.

Zelia has fled and is clearly guilty of a breach of promise. If we had her true name we should find a legal remedy. But like a South American belle, she wraps herself in her incognito. With our friend W. B. it is clearly a dead shot. His charmed imagination has invested her with every thing beautiful and celestial. It is cruel thus "to strike and conceal the hand."

To W. C. W.'s inquiries respecting the plan of building described in our April number, we answer,

1st, It would undoubtedly be better to have the lumber well seasoned on account of the plastering. 2d, Boards 1 1/2 inch in thickness would answer as well as inch boards,—the thinner the boards undoubtedly the firmer the work. 3d, We are not prepared to say that it would not be equally well to lay the boards in line mortar as to nail them; but have not seen it done. It strikes us favorably.

Flora in reply to Zelia, J. S. D. on Condition of the Farmers, Turnspiced, Inquiries respecting Wheat, J. R. B. on Silk Culture, S. C. L. on Threshing Machines, J. W. S. second valuable communication, B. M.'s remarks on Condition of English Farmers, inquiry respecting White Daisy, J. Mc. L.'s inquiries respecting Stearine from Lord, J. C. on the same subject, A. G.'s plan of a Cheap House, B. K. D. on Pruning, and various other favors, which we have no room even to particularise, are necessarily excluded by the press of matter previously received. We shall do what we can to clear the docket at the next session of the court, and hope our friends will give us many new cases.

Plagiarism or Poaching; or in the language of the Coves, Lifting.

The Farmer's Gazette in Conn., publishes, without the customary credit a long article, which cost us some pains to prepare, on raising Indian Corn for fodder. This is soon after copied into the American Farmer as from the Connecticut Farmer's Gazette, and now reappears in the Southern Agriculturist under the same head. This is all very gratifying to our self-esteem and our honest desire to be useful. As to its moral bearings, we mean the rules of editorial courtesy and justice, we submit to the honest judgment of those who are taken in the fact.

We have been honored in a similar way recently by our good friends the Family Visitor and the Boston Cultivator, which they will probably set down to the head of fair copying; and, as being all in the family, we will not complain. Even the old honest New England Farmer has got some few spots upon its hands. We say this in the most civil and friendly manner; and so sure as we should unfortunately discover that we have disturbed a single live hornet, we shall beat a retreat; and to those who have taken away our coat we shall surrender our cloak also.

But this is not the whole of it. If we were introduced to the public only under such honorable auspices, we should not be so much disturbed by it; but when the bellwethers jump over the fence, all the rest

of the innumerable heads follow. So our old clothes are at last hung out at every Jew's stall in the country, and represented as bronzed and of the latest fashion, without a word being said of the real suttler, nor even of the goose that precees them. Now all this is very comforting to one's vanity, but it does not butter poor Ship's bread.

Sometimes in such cases we think that our wares, poor as they may be, are like the sheep upon the island of Nantucket, where in shearing and killing time, like gentlemen among the umbrellas and hats at the close of a fashionable party, the pretors get upon the rule of taking the best until all are gone. Gentlemen! in all cases of future appropriation, we beg of you to look at the ear-marks. For ourselves, we belong to the non-resistants, and shall knowingly go upon no mareswing expedition. We shall sail under no pirate's flag, though the agricultural sea is now covered with the noblest barks, spreading their canvases to the breeze and laden with the richest cargoes. We navigate only a humble coasting sloop, with a bit of bunting at the mast head merely for a weathercock. We mean to carry an assorted Connecticut variety cargo of nicknacks, useful in a family way, but no wooden nutmegs or basswood melon seeds; and if any of our good friends desire any of our humble wares for use or disposal, they are welcome to any or all of them, if they will not tear off the shop bill. We hope we shall not offend; but for fear, we can only add, "Ripe mended gratis."

Analysis of Soils.

G. W. of Northbridge, inquires as to the analysis of soils. We are entirely satisfied that no common farmer can undertake successfully this difficult chemical investigation. Davy has given some directions for doing it in his Lectures and Chapul in his valuable treatise on Agricultural Chemistry, but neither of them is deemed satisfactory or accurate by modern Chemists. Dr. C. T. Jackson has treated to the subject in his Geological Survey of Rhode Island. It requires apparatus, preparation, and practical skill quite beyond the reach of persons who have not made chemistry matter of long, careful study and practical application. We want, therefore, a State Chemist, whose business it shall be to examine, chemically, soils which may be sent to him. But in order to understand how much valuable knowledge even the most common farmer can acquire of the nature of different soils, we would refer our correspondent to a treatise on the physical properties of soils in the second number, vol. 1. p. 177, of the Transactions of the British Royal Agricultural Society. This is a paper of very great value, and there are several others relating to the same or kindred topics in the same excellent work, which has now reached to its third volume. The paper to which we refer is practical as well as scientific, and has likewise the great merit of being intelligible. We shall presently give it to our readers.

For various reasons, which we shall some time give more at large, we have not the same confident anticipations of extraordinary benefits to be derived from the chemical analysis of soils, which many persons look for, unless by a process not yet adopted, we first ascertain what the soil contains before the plant is grown in it, and what it contains afterwards, that we may if possible, determine what the plant has taken from it. But the great difficulty is, that in the process of analysing the soil, filtering, drying, burning, and so forth, many subtle matters entirely escape; and such new arrangements and combinations take place, that from the condition to which it is then reduced, it is difficult to determine what it was or how it operated in its original condition. We epitomate most valuable results from the analysis of crops and manures, and much from the analysis of soils, but what has

been accustomed in the way of explanation, to serve little else than to convince us of our ignorance and to show us how profound, to human perception are the subtle mysteries of vegetable and animal life.

Convention of Ploughmakers and Farmers.

A convention of Ploughmakers from all parts of the country and others interested, is appointed to be held in Canandaigua on Monday, the 20th day of June inst. This day precedes the meeting of the Circuit Court, when it is expected the cases of the heirs of Jethro Wood against several ploughmakers for an alleged infringement of his patent right, will be tried.

The ploughmakers in different parts of the country have been threatened and visited with vexatious suits on these grounds; and their confident expectation is by eliciting such facts as may in this way be brought to light, to show that Wood had no just claims to an exclusive right in the case; and that the extension of his patent was surreptitiously and fraudulently obtained; and thus put an end to these prosecutions.

It is a subject which concerns all the manufacturers of cast iron ploughs throughout the country, and the farmers generally, who, so long as this claim remains must be taxed for the patent right of every plough they purchase. As much valuable information connected with ploughs and ploughing may be thus incidentally brought out, it is earnestly hoped that the attendance of farmers and others interested will be general.

Canada Thistles.

A correspondent G. K. inquires if "in respect to that vilest of all weeds, the Canada Thistle, something cannot be done for its extirpation. It is really high time that the farmers look to this; and that immediately. If something is not done soon, the whole country will be nothing but thistles. In vain may the industrious farmer cut and plough and plough and cut, and endeavor to extirpate this vile weed, if his neighbor is allowed to supply him from his land; and it would seem as though the seed thus supplied from a neighbor is better than our own."

We agree to all this; and consider such a neighbor as he describes who willingly, by positive act or by avoidable neglect, inflicts any injury upon his neighbor, is even a viler weed than the Canada Thistle, and deserves to have his nose powerfully rubbed with a good bunch of them three times a day until he reforms. But there is no legal remedy in this case, though we think there should be, since there are few ways in which a man can more injure his neighbor than by filling his field with noxious and untractable weeds.

With respect to the destruction of these weeds, a farmer in Le Roy states that four ploughings in a season will effectually destroy them, and that after this he has taken a fine crop of wheat on the same land, considering the ploughing in of these thistles and their decay as a fine preparation or dressing of the land for the wheat. This in some degree conforms to the experiment of Mr. Kelly in Haverhill, Mass., who ploughed in an abundant crop of charlock or wild mustard three times in a season, and obtained a crop of rye of thirty seven bushels to the acre, where before not more than from eight to thirteen had been the usual product. Of this remarkable and most instructive experiment we shall give a full account hereafter. G. K. promises that we shall have his method of destroying Canada Thistles. Try your note by all means. We understand it as now due.

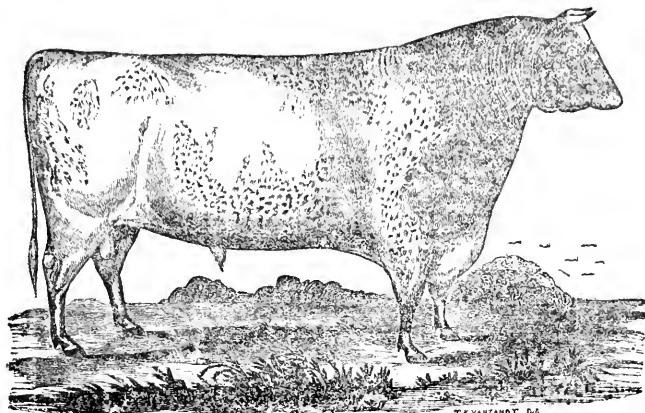
Wind Mill.

J. Horsefield says in a P. S., "Allow me to say to Mr. O. Woyte, that he will confer a favor on me and probably on others, if he will give in your paper a plan and description of the Wind Mill which he noticed in a late number."

Mr. Woyte, please to comply. We know your kindness in days gone by. There are few men of whom we would soon ask a favor.

Your old friend,

THE EDITOR.



IMPROVED SHORT HORN BULL "ARCHER."

OWNED BY J. M. SHERWOOD, ESQ., ALBURN, N. Y.,

Which obtained the first Premium at the Fair of the New York State Agricultural Society, at Syracuse September 29th, 1841.

"ARCHER" is an cow mostly white, with a roan head and neck—his body has some roan spots—was bred by F. ROTCH, Esq., Butternut, Otsego Co., N. Y. Calved 15th of June, 1837. Sired by ROTLO.

Dum, Adeline, by Frederick, (H.B.)	1660	Rotlo, sired by Patriot, (Herd Book)	2412
G. G. "Adeline by Onghens,	43	Dum, Romp by Admiral,	1608
G. G. "Alpide by Alfred,	23	G. " Moss Rose by Young Denton,	968
G. G. G. " Strawberry by Windsor,	608	G. G. " Moss by Young Denton,	963
G. G. G. G. " Old Dairy by Favorite,	252	G. G. G. " Ruby by Denton,	195
G. G. G. G. G. " Old Dairy by Panch,	531	G. G. G. G. " Old Red Nose by Frumell,	659
G. G. G. G. G. G. " Old Dairy by Hubback,	316		

Salt and the Grub Worm.

MR. EDITOR.—Through the columns of your valuable paper, I hope to make the public acquainted with the value of the common black grub, as an agent in the cultivation of corn, when their labors are directed by the genius of man. This, sir, is a new position, a position which has for its foundation, that there has nothing been made in vain, but that all things were made for the benefit and service of man and subject to his direction, and that it is only in the ignorance of man that worms and insects become a scourge upon the face of the earth. The grub has been literally cursed for following the instinct of his nature, which teaches him to eat the corn and reject the grass and sorrel, with which our fields are generally filled. Now, sir, if those who have caused the grub and have advised the agriculturist to follow him with a sharp piece of tin or a knife, with which to decapitate him, or to tie him up in a rag and let him float down stream, had but applied common salt to the hills of corn in the place of gypsum, then, throughout the land, the merits of the grub would have been duly appreciated, then he would have destroyed the grass and sorrel in place of the corn,—thus materially aiding the agriculturist.

In my humble opinion, the introduction of salt as a manure, and to prevent the ravages of the grub, will be of incalculable benefit to the country. Upon our farm we have used salt as a manure and as a protection to the corn from the grub, for a period of seven or eight years. We ought to be capable of judging of the benefits which we have received from using it. During this period we have missed the application but one season—the result was the loss of our crop: from a field of about twenty acres, we harvested but one cart load of corn, where, had not the grub injured it, we should in all probability have harvested fifty bushels to the acre. Last season, 1841, we planted about twenty acres; the grubs were so plenty that we despaired of protecting it from them: indeed, upon an average, I should think there were twenty to every

hill of corn. We applied one bushel of salt to the acre; the protection was ample; scarcely a single blade was touched, but every spear of grass and sorrel was destroyed by them, and in this way they assisted in the cultivation. The application should be made to the corn is just peeping out of the ground. The salt should be put exactly upon the hills, and at the rate of one bushel to the acre—more than one bushel to the acre would do no harm, provided it is put on with common judgment. One bushel is sufficient if properly applied.

If you think this communication will be of any benefit to agriculture, you will please publish it and oblige a constant reader of your valuable paper.

THOMAS N. ALLEN.

Salt Point, Dutchess Co., 1842.

There is some wit in the foregoing, and we believe as much truth as wit. We know a farmer in whose statements we place entire reliance, who has been accustomed for years to put a quantity of salt and mix it well with his manure, which he intended to put in the hill at planting. It has happened repeatedly in these cases that his own corn has been uninjured by the grub, while his neighbor's just over the fence has suffered severely. He is confident of its efficacy. The application of salt to the hill, as described by our correspondent, is a new mode.—Ed.

Agricultural Publications.

Wiley & Putnam, New York, are importing and republishing with great spirit, several English Agricultural Publications of much value. *Libby's Agricultural Chemistry* has gone to a third edition at the Cambridge Press. *Dana's Muck Manual* for farmers, is on its way to a second edition. Little & Brown, Boston, are importing constantly many valuable works on Agriculture and Gardening. We shall get up and keep up with our notices of them presently. A valuable notice from J. E. T., of Johnson's Lecture on Agricultural Chemistry, republished by Wiley & Putnam, is necessarily postponed.

[The following article was written for our May number, but was unavoidably deferred.—*Ed.*]

Many thanks to Zelia for her invitation to the "ladies' saloon." We shall "walk in" and have a chat with her, Capt. Colman's label over the door, "no admission to gentlemen," "to the contrary notwithstanding." And if, or supposing, (as the case may be,) the old gentleman looks a little awry at us, why, we'll make the best we can of it, and if he is really vociferous against us, we'll take passage in another boat next time, and ten to one if we do not take some dozen or so of his passengers along with us. But for Zelia, how shall we approach her pure spirit, with a basket of vegetables or a bouquet of flowers? *She is certainly deserving of her choice, one so eloquent in calling her country women to the path of duty in a time of such calamity as the present. Surely she must be one of a thousand. Yet why do we dwell upon the excellencies of one who fully develops her own merits, and who is emphatically "above all praise."*

Floral Department.—Annals.

It is a very common if not almost universal error in the culture of annual flowers, that they are sown too thick. Of course, the consequence is, that they grow up in a dwarfish and imperfect manner. Their thickness should be in proportion to the size which they will naturally attain. China asters and plants of that size, require to be at least one foot apart, in order to give themselves a full development. Zinnias, immortelles, &c., eighteen inches; gillflowers and balsams are very imperfect, comparatively, unless they have ample space; to Mignonette two feet at least, should be allowed. In preparing the ground for the reception of annals, too much pains cannot be taken for its pulverization, nor can it, in most cases, be made too rich. Let not the farmer deem the manure lost which is put upon the little patch which the females of his household ask for their flowers. Though it may be taken from some other portion of his premises, where its good effects would surely have been visible, it will produce consequences of a most cheering character in its present investment, by encouraging his daughters in pleasant habits of home industry, while those of his neighbors, it may be, for want of this health-promoting, good taste-exciting employment on their own premises, may become wanderers forth among the daughters of the land, to their own injury, and may be, to the annoyance and injury of those who ought not to be contaminated by their influence. But if economy, which surely ought to be a universal watchword, should too hard at the idea of a little compost for the parterre, by putting on her spade and pushing her investigation of domestic concerns a little further, after the demands of the farm and the vegetable garden have been supplied, or "every thing has been raked and serped" to satisfy their demands, and they, like the sorrowing creditor, who trusted too far, when the arrogant debtor comes to require an acceptance of a dividend or nothing, have yielded to the necessity of the case, will find in certain by-ways and about hedges enough to satisfy the demands of Flora, which, unless it were gathered up and offered at her shrine, would have been lost, or worse, would have tended to promote luxuriant growths of weeds, the vile pests of the farmer's interests, and foul spots on the beautiful surface of his cultivated territories. If this plan is thought foolish or wasteful or out of place, we have another remedy to apply, by which these objectors may pursue the even tenor of their way, and yet flowers be made to spring up and bloom in loveliness and beauty and perfume the air with healthful fragrance. This is to throw the haulm of the flowers into the farm yard when the season of flowering is past, instead of allowing them to remain upon the ground over winter, to be burnt in the spring.

In this way, flowers will work their own passage and pay toll. The form of flower gardens, is lost when left to the taste of the occupant. Thus a great variety of flowers, in passing through a country will present themselves, to invite the attention and excite the admiration of the beholder.

The Strawberry.

If any thing can be more disagreeable to the mind (i.e. as regards man's local habitation) than a large and elegant dwelling, freshly painted and adorned with its bright green shutters, with yards around it filled with dock, thistles, or any of the &c. family, with here and there a slough, broken cart, or brass heap, all which go to make up a variety; with the hot sun scalding with his piercing rays the newly varnished castle, or the relentless storms bringing out their fury in mockery of the improvements which enterprise has begun on the premises, without a single shade to give freshness to the scenery, or a single cluster of shrubbery to impart loveliness to the spot, it must be the idea of the deluded spirit of a man who conceives the objects of taste all gratified, and matters of utility all arranged, and motives of interest all fulfilled, when he brings his improvements to the state of things which we have described. Think of it Zelia, there is something wrong, morally and physically wrong, where such a state of premises is found as we have described, and were we a lady, we should reverse the saying of Solomon and conclude that we should live—any where else, "than in a wide house" with such a being as we should naturally conclude occupied the one above noted. Yet we would not influence nor hinder anyone from forming a laqus which should give them internal possession of such premises, but on the contrary encourage it, on a principle of general benevolence, for they might do much good by such a sacrifice.

The front yard (and as much more as they wish) should always be placed at the disposal of the females of the household for flowers and flowering shrubs. In the culture of these, grass and weeds should be as thoroughly extirpated as for a crop of corn. Then they will grow luxuriantly with little care beyond that of pruning, which every one will attend to in order to bring them into the beautiful shape which their fancy may direct. Shrubs, to succeed well, should be removed with care, and may be done either in fall or spring. Trees should be placed on the outer margin of shrubberies for their beauty and protection.

W. B.

Native Shrubs and Plants.

It brings no very cheering reflection upon the taste of the American people, that every thing must be transatlantic in its origin, in order to secure their attachment. But it is too true with regard to many things. Our hats must be of the latest London or Paris fashion. Our boots must not only, in too many instances be of European fabric, but must be of Messrs. Jacques & Co's. last style. Our boots—shoes at least, must be Victoria; and even our American plants, like the aborigines of the country—like the republican simplicity of our forefathers, must be crowded out of the way to make room for those of foreign origin. And this is directly in the face of the wisdom and good taste of our eastern brethren. In all Europe, travellers proclaim the beauty of American forests. Their naturalists have traversed them in their length and breadth; and have carried home at great expense, their rich and varied productions. The Garden of Plants, one of the richest collections in the world, obtained some of its most valued specimens from our wilds, and the parks of the lords of ancient Britain are decorated with trees and shrubs of our republican origin. Though the forests of our country contain far greater varieties than can be found in theirs, they

do not trace to this the cause of their attachment to our plants, some of which bear the names of their most distinguished men. But it is their peculiar and unrivalled beauty which attracts their notice and secures to them a right of soil in the domains of kings and emperors. And it argues well for the veterans of taste and science in those countries that it is so, for there is certainly no portion of the earth that can exhibit a greater variety or more beautiful vegetable productions than ours. What is a fitter emblem of meekness and simplicity than our Arbutus, trailing a humble quietude on the ground, and opening its choicest petals while yet the earth is held in the durance of frosts, and the snows are still unpassed? What fitter emblem of purity than is to be found in the short lived Sanguinaria Canadensis, which comes and goes while yet the frogs are piping the early notes of nature liberated from the bondage of winter? Go into the woods and along the glens at any time while the early season is yet fresh in youth, and what more picturesque beauties can present themselves than those there exhibited? Take summer, the noon of the seasons, and look at the Azaleas, the Kalmias, the Rhododendrons and a thousand other families, which though not of royal blood, have been introduced to royal favor, and where can nature's storehouse furnish objects to charm the eye superior to these? Yet we pass them almost unheeded, or perhaps what is worse we mutilate them in this season of their beauty on glory, to furnish fading memorials of their loveliness for a brief day for our parlors, while the weeping ster from which we robbed our trophies, must in solitude sustain its fair remaining blossoms.

To bluish unseen.

And waste their sweetness on the desert air."

When if the root and branch were removed to our dwellings and given a kind location there, they would charm in some varied form at all seasons, and in the bright time of flowers, regale our eyes and perfume the atmosphere through the period of their floral existence, without the necessity of a daily renewal as the vase or recourse to artificial means. Let it be inferred that we would exclude foreign plants from our grounds, far from it. We admire and would cultivate them by all means, but let us not stumble over those all around us, to catch greedily at the "feet and dead bought." But we must leave the Saloon, Zelia, and go on deck and try to make acquaintance with Capt. C.

W. B.

NOTICES.

Address before the New York State Agricultural Society in Albany, 19th Jan., 1842. By J. B. Not

Esq., President of the Society. This sensible address has at last made its appearance. Immediately on its delivery we gave from our notes a sketch of it. In comparing our sketch with the address, we are happy in finding that we had given in the main a just account of its views and sentiments, and in but one instance, and that of trifling moment, had we misrepresented it. The manuscript was of course far inferior to that flowing and classic style in which the author presents himself. We should have been happy to republish the whole address, but as it will be circulated throughout the state, as we have given an extended sketch of it, as our columns are crowded we must forego any other pleasure than that of presenting the subjoined extracts.

"Young men, after having finished their academic course, are embarrassed in the choice of their future professions, for they find the professions crowded to excess; so crowded that men of fair talents and respectable industry are rewarded only by a mediocre success. Hence it is that we unfortunately find many too many otherwise respectable men of all political creeds, who are ready at any fortunate crisis to abandon their professions and seek instead, the rewards of office. I do not speak of those whose ambition prompts them, regardless of the cost, to climb the

dd eminence which has always been found, it is said, "narrow for friendship, and too slippery for safety" for this is a legitimate, though alas, a dazzling object of pursuit. But I speak of those who make political pursuit a mere question of profit and loss, so such men we can point out a field of exertion, here at least "for a portion of their life, their power would be employed in a manner less revolting to conscience; and with results quite as useful to their country and to the world."

It is important therefore to do away the erroneous impression that there is no other pursuit worthy the attention of an educated man, than the so called liberal professions, and that a liberal education is thrown away if bestowed upon a farmer. If the farmer must by necessity be a mere rustic, and any one who engages in the pursuit, will allow himself to sink to this ignominious level, then will a very humble education fit him for his untoward destiny. But if a farmer is desirous of taking rank with the Gaylords and the Phineys, of our land, and with men of kindred spirit in their lands, then will his calling give abundant occasion to his talents, however guided, and his attainments, however profound. This is not all; a farmer may be even a man of refined taste and exquisite genius. A good farm should not be characterized alone by its trim fence and its straight furrows, but it should also be an object of beauty. "Man made the town, God made the farm;" and it ought to bear the impress of his beautiful workmanship. There are farms too, where, by the skillful disposition of wood and of shrubbery, there is, as it were, grouped into a scene of surpassing loveliness, the beeding cliff, the smiling meadow, and the meandering river. And still the claims to taste and genius be denied to a farmer, because it is such a secular and lowly avocation, worthy to him who can transfer it to the living canvas? It may be said that these higher accomplishments, constitute no part of practical farming, because it contributes nothing directly to a farmer's prosperity. "To such men," as Cbeever says, "God himself, as the creator of the universe, cannot appear as an architect of practical wisdom, for he has covered the earth with objects, the sky and the clouds with tints, whose surpassing beauty is their only utility. This beauty is eminently useful, because man who beholds it is a moral," as well as a thrifty being—"because it awakens the soul to moral contemplations, excites the imagination, softens the sensibilities of the heart, because it tells him of his mortality and his immortality, giving him symbols of both, and holding with him a perpetual conversation of the glory and wisdom and goodness of God."

"To some, the meanest flower that blows can give Thoughts that do often lie too deep for tears."

If I am asked whether the pursuits of literature are incompatible with the practice of husbandry, I answer that they are at all events incompatible with the practice of a profession. Whoever would woo the muses must bid farewell to professional eminence. But there are farmers, thrifty laborious farmers, men exposed to the summer's heat and the winter's cold, who are well known in the walks of literature. Why should it be otherwise? There is not an operation of practical husbandry, however humble, that is not immortalized in Thomson's, or Gray's, or Cowper's song. To such men, how melodious was the reaper's song, how graceful the mower's movements, how picturesque the loaded train, groning beneath the burden of the gathered harvests? Much more then should rural pursuits awaken the high souled eloquence of those who are habitually engaged in them. There was a time, it was olden time "dear, but there was a time when pastoral life was deemed especially favorable to sublime conceptions; and one shepherd at any rate has raised through many an age the loftiest emotions, who exclaimed as he stood and his flocks raised his contemplative eye to yonder firmament.

"When I consider thy heavens, the work of thy fingers, the moon and the stars which thou has ordained, what is man that thou art mindful of him, and the son of man that thou visitest him?" Agriculture then, is not inimical to the pursuits of science and literature; but still it is too often deemed a degrading employment. He talks of bees, said Dr. Johnson sneeringly, of one of his most intimate friends, and yet the ill tempered and ungenerous satire is utterly at variance with even his utilitarian notions. In settling the relative ranks of the various callings of life, it should be remembered that we are governed in our views by old and intricate prejudices. The noble by which they are graduated, was formed in the ages of ignorance, when men of the learned professions were monks; men of ambition, soldiers; and husbandmen, serfs. But the times are altered; and the pathway to fame no longer leads exclusively to fields

covered with courage and slaughter, and may yet lead to fields smiling with the gifts of Ceres and Pomona.

We, therefore, who are ardently attached to our favorite pursuit, who are aware of its privileges and acquainted with its delights, should do all in our power to disabuse the public mind of its mistaken prejudices, and to raise it in the public estimation to the level of the liberal professions, so that he may have no fear of losing caste, who exchanges the merchant's counting-room and lawyer's desk, for the pursuits of agriculture.

"Nor ye who live
Think these last things unworthy of your ears.
Such scenes as these the rural Harp sung
To wide imperial Rome, in the old height
Of eloquence and taste, by Greece refined.
In ancient times the sacred plow employed
The kings and awful fates of mankind;
And some, with whom compared your insect tribes
Are but the beings of a summer's day,
Have held the scale of empire, ruled the storm
Of mighty wars, and with unwaried hand
Disdaining little delicacies, reared
The plow and greatly independent lived."

"Generate the plow,
And o'er your hills and long withdrawing veils
Let Autumn spread his treasures to the sun,
Luxuriant and unbounded. As the sea
Far through his azure turbulent domain,
Yet deeper ocean, and from a thousand shores
Waits all the prod of life into your ports;
So with superior boon may your rich soil
Exultant Nature's better blessings pour
Over every hand, the golden autumnal clothe,
And be the exhaustless granary of a world."

Address delivered before the Essex Agricultural Society in Massachusetts, Sept. 30th, 1811. By Alonzo Gray.

This address is very creditable to the author. Its main object is to show the advantages and importance of science to agriculture; its connection with the improvement of the art, with its productiveness and with the dignity and respectability of the agricultural profession. In the main we agree in all the sentiments expressed. If the farmers would elevate their art, they must elevate themselves.

Mr. Gray speaks of an establishment in connexion with the theological and literary institutions at Andover, designed to furnish instruction in gardening and agriculture. These institutions have been endowed with a most extraordinary liberality for the specific purposes of their establishment, and such an addition to their other means of improvement will doubtless prove of eminent utility.

There are particular branches of study directly concerned in agricultural improvement. These should of course be objects of pursuit; and to practise farming with success, a man should become familiar with all its operations; and if not himself capable of performing them, yet capable of determining when they are done and exactly how they should be done. But very much more than this is desirable. The most humane and liberal education will not be lost upon a farmer, unless it should, as it is alas! too often its effect, inflame his mind with foolish pride and self-conceit, and lead him to disdain labor and its humble accompaniments. In all great improvements in any thing connected with human life, society, or the arts, mind is the propelling power. The cultivation and strengthening of the mind, the creating within it a thirst for universal knowledge and continually stimulating this appetite, is the great instrument of success in any and every valuable art or profession. Education for the farmers, as for every other class in the community, should be regarded in its most comprehensive sense, not so much as the imparting of knowledge, this is but a small part of education, but as teaching man the proper use and application of all his intellectual powers, and exciting him to their constant and highest exertions. While, therefore, we rejoice in the establishment of schools designed to teach the practical operations of husbandry, and all the arts and sciences more directly and specifically connected with it, we should insist, wherever we had the power, as

is suggested in Mr. Gray's Address, that there should be associated with such institutions the fullest course of instruction in all liberal arts and in general knowledge.

We should be glad to quote liberally from this address, but at the present we must restrict ourselves to a small portion.

"It is one of the most glaring defects in our system of popular instruction, that no provision is made for the study of those liberal sciences which are intimately connected with agriculture, and a knowledge of which is necessary in order that the science itself may be understood; we are therefore met with an obstacle which it is not easy to surmount, whenever we attempt to instruct the community into the principles of the art. There is wanting not light on agriculture, but a recipient power in the general mind to collect the light which actually exists. There is knowledge enough in the world to save it, if it could be brought to bear upon the popular mind; hence what we need is such an elementary knowledge of mineralogy, botany, chemistry and natural philosophy, with their application to the arts, that the science of agriculture may be understood, and such a discipline of the popular intellect that this knowledge may be practically applied.

For want of this recipient power, the press, that great engine of popular instruction, is deprived of the greater part of its efficiency. Popular lectures, the efforts, the discoveries of scientific men exert but a feeble influence. The fostering care of the Legislature, and the indefatigable labors of agricultural societies scarcely reach the general masses of farmers. The consequence is that no preparation is considered desirable to become a farmer, as if men were endowed for this employment with an instinct like the bee or beaver, which is perfect in itself and could not be improved by education.

While some degree of preparation is deemed necessary to practice the *rudist trade*, that of a *collier* or *common pedlar*, the most difficult and important of all trades may be carried on, it is supposed, without any preparatory or professional knowledge. What should we think of the wisdom or sense of that community which should encourage all its physicians, lawyers, ministers, merchants and politicians to engage in their respective professions without any professional knowledge whatever? And yet there is as much propriety for a young man to engage in the profession of law, medicine, or theology, without professional knowledge, as in that of farming without a knowledge of its fundamental principles. True, he might do more injury to society in the former case, but he would have an equal title to the character of a quack in both; and quackery in farming has many striking analogies to quackery in medicine, and were it not so common, would meet with similar ridicule and rebuke by all intelligent men.

But how can this recipient power be supplied, and how can this professional knowledge be acquired, unless agriculture be made a subject of study? As our common school system excludes those kindred branches of natural science which are necessary to a professional knowledge of agriculture, the commencement of improvement must be made in our academies; and higher seminaries. Our colleges have a different object, their course of study has become too rigidly fixed to be altered, and it is doubtful whether any success could crown the effort if tried. But this is not the case with our academies, and scientific agriculture may be introduced into some of them and taught successfully to those who are to be the future cultivators of the soil. With an institution liberally endowed, with proper able, text books, lectures, apparatus, and experiments conducted in the field, the young farmer, after having received a thorough discipline in a preparatory course, may obtain his education by obtaining a scientific knowledge of agriculture previous to entering upon the great business of life.

We would not establish institutions for the mere study of agriculture, but would connect it with an extended course of English education. We are no advocates of a superficial course of training. We would

* After the subject has been introduced into a few of our higher seminaries, for the purpose of preparing the teachers of our common schools to instruct in the various departments of Natural History, the subject may then be introduced into common schools, and until we have teachers qualified for such instructions, we must confine our efforts to higher seminaries, where those facilities may be furnished which are required for teaching the first principles of chemistry and Natural History. The great difficulty now is that we have neither qualified teachers, nor books, nor cabinets, nor apparatus, which are requisite to prepare men in our common schools for the theoretical and practical parts of agriculture and the various other arts and trades.

new inventions which are continually being made for us. We can by means of our *Fans* see each other, and seeing, he enabled to judge of the effect of what may be offered.

Statistics of Cuyahoga County.—And if the freemen say do not march in the van of the agriculturists, the facts must be theirs. Nature has been no kinder to them; with a soil of great fertility, well adapted to the production of all the principal natural products of this latitude, we have in addition inexhaustible beds of gypsum, quarries of lime, and swamps of marl, with also a fair promise of abundance of soil—all that then is required, is the to do, the energy to perform.

As appears from the census taken in 1810, there are about eleven thousand men in this county engaged in agriculture, while the whole number engaged in all other business was only about four thousand. The greater portion of this eleven thousand men who own the land they occupy, the bone and marrow of the County, the men who pay our taxes; port our schools, who if need be, will fight our battles, have a home and a hearth stone to produce and defend, are a class the most honest, the most moral, the most industrious, the most independent and most virtuous, and certainly such men need only be convinced that their best interests may and will be promoted by this Society, to render them at once willing and anxious to join our ranks. Look for a moment upon the products of this County for the year 1810. As appears from the census of that year, were raised in this county that year more than six hundred thousand bushels of wheat, more than eighty thousand bushels of barley, more than four hundred thousand bushels of oats, more than forty thousand bushels of buckwheat, near six hundred thousand sheaves of corn, near seven hundred thousand bushels of potatoes, more than three hundred thousand pounds of wool, more than seventy thousand tons of hay, more than two hundred thousand pounds of maple sugar were made the same year, and the products of a dairy amounted to near one hundred and ninety thousand dollars. The aggregate value of all the above, the produce of a single year, at present prices, could exceed two millions of dollars, the agricultural products of about eleven thousand men, many of whom doubtless were men who were older upon the soil. Again, as appears from the same Census, there were owned by citizens of the County, on the first day of January of that year, more than thirteen thousand acres, near fifty thousand neat cattle, near two hundred thousand sheep, and more than sixty thousand pigs.

Address delivered before the Medina County (Ohio) Agricultural Society, October 7th, 1841. By Col. Abraham Norton.

This is a glowing and impassioned address in favor of agriculture; inculcating the value and dignity of labor, and urging with great earnestness the cause of agricultural improvement. We give the title as it appears, and though it is not exactly turning a spear into a pruning hook, it exhibits a transformation not very unlike, in changing a military officer into a good farmer.

With all the gallantry of a military man, he speaks thus of the influence of woman in every good cause.

"While the unlettered natives of the earth have either deified woman as a goddess or debased her as a slave, we are delighted to accept her as the equal and honored companion of our homes, and the pride and ornament of our assemblies. At her feet do we learn lessons of mental refinement and moral sensibility. This is no ideal compliment of mine, or vain picture drawn to foster her pride and feed her vanity, but the sincere conviction of every mind susceptible of truth. When the tide of woman's influence is turned to upbuilding of our societies, of whatever name, we ask no surer token of success. With it our highest anticipations are realized; without it our stoutest efforts are paralyzed. Whatever be her enterprise, if successful she is not so elated as to miss her object; if disappointed, she does not give up the pursuit; and if the last prospect of success vanish away, she will not despair, but sit 'smiling at grief.' I care not how great, how difficult and discouraging the enterprise, she has courage and perseverance adequate to its accomplishment."

This is not mere rhetoric, but sober truth; and no one can possibly suppose after this that the Colonel can be a bachelor.

Address delivered before the Agricultural Society of Orange County, November 17th, 1841. By John Caldwell, Esq., President.

This is a valuable address; and we are glad that the farmers of Orange county have among them so enlightened and zealous a friend of the good cause of Agricultural Improvement. We shall give two extracts from the address.

The value of an industrious profession.—Agricultural pursuits are peculiarly congenial to the people of this country, and to our republican institutions, they are the foundation of our prosperity and the main link in that chain of connection which binds us together as a nation, and contributes to our wealth, our strength, and our independence. It is, therefore, gratifying to observe the lively interest every where taking in the cultivation of the earth. It was grossly neglected in the former ages, when speculation in building lots on the mountain tops, or even in the moon, seemed to overturn the world with madness; the dire results of such infatuation have cured the error, and rationality is again restored, though at heavy sacrifices to the bewildered victim of cupidity. Manufacturers, Commerce, and the mechanic arts, owe, as to an indulgent, fostering mother, their protection in infancy, and their success in the after days of their progress, to the never failing aid of successful agriculture. Is it not, therefore lamentable to see so many of our vigorous youth, to withdraw themselves from its ennobling pursuits, to desert their sweetens, not as the Poet says—"to the waste air," but behind the counters of petty and inefficient traffic? Thus, too, by filling saloons peculiarly suited to the softer sex, depriving thousands of unprotected females of appropriate employment, and compelling them to earn a scanty subsistence in such other ways as remain open to them, by incessant, but ill-regulated labor; often at the expense of health and constitution, worn down spirits and broken hearts. This is no exaggerated representation; let any of you visit the modes of honest poverty in our cities, and you will find it more than realized. One of the ablest periodical writers of Great Britain, speaking of the ambition in that country for professional life, the rush into what are called the learned professions of law, physic, and divinity, points to some of the consequences in language which is no less applicable here.

"But thousands," says he, "have died of broken hearts in these pursuits,—thousands who would have been happy behind the plough, or prosperous in manufacturing or mechanical pursuits;—thousands in the desperate struggle of the thankless professions, look upon the simplicity of a life of manual labor with perpetual envy, and thousands, by a worse fate still, are driven to necessities which degrade the principles of honor within them, accustom them to humiliating modes of obtaining subsistence, and make out by administering to the vices of others, the livelihood which is refused to their legitimate exertions." There is, however, in this our beloved country, a general feeling, which pervades the entire mass. An idle man, however wealthy, is looked on with contempt, and can never enjoy the confidence or respect of his fellow-citizens.

Habits of exact observation encouraged.—While I congratulate you on the vast amount of useful matter scattered over the land in these periodicals, I object to the unnecessary parade of scientific terms, frequently unintelligible to plain men like myself, which there is reason to fear deters many from looking at them at all. A woman may bake a good batch of bread in total ignorance of the theory of fermentation, and a farmer may raise a good crop, and know little of the alluvial fertilities of soil and manures. It is well—it is praiseworthy for those who have leisure, talent and inclination, to pursue such investigations, whilst the practical man applies them to his every day pursuits. Indeed, the whole process of cultivation may be considered as a well arranged series of experiments, and every intelligent farmer an experimental philosopher, the soil his subject matter, the elements his agent, and his laboratory bounded only by the wide canopy of heaven—there he follows up causes to their effects; there he traces back effects to their causes, and there too, in the midst of his labors; he looks from nature up to nature's God. But allow me, gentlemen to suggest that, as in all other arts and sciences, so also in agriculture, the various operations as they occur in the successive stages of the process, ought to be carefully and minutely noted, and for this purpose; it is the

practice of some intelligent farmers, to keep a farm book, in which every lot is designated by number, or otherwise, and the treatment to which each is subjected in each year regularly recorded, thereby laying the basis for just conclusions, from well established premises.

Leaves for Manure.

An enquiry comes up in the second number of the current volume of the Farmer concerning the leaves in "hard wood land" being used as a manure, and the success attending. In answer to which we say, that if the land produces only hardwood, they furnish the principal manure for the timber when growing, and for other purposes when the wood is taken off. The growth of such timber is usually of a profitable and sometimes of a rapid character. The land where such timber is found, is of various but generally productive character, and retains its fertility well.

Taken from the forest and placed in the sty or barn-yard, where they can be subject to the operations of swine and other stock, and it forms one of the most valuable manures, both for present use and future durability, that can be employed. It answers well for all kinds of crops. In the crude or unmanufactured state, in which it is taken from the woods, the manure is perhaps as good as any for potatoes in the hill, for fruit and forest trees, currant bushes, &c.

W. B.

For the New England Farmer.

Harrowing Potatoes.

FRIEND COLMAN.—It is not my object to argue the profitability of a crop of potatoes, or how the greatest quantity can be raised from an acre, but to suggest an improvement in the cultivation of them. My practice has been, for two or three years, with a light drag to drag them over thoroughly, just before they come up. My objects in this are to pulverise the ground well, which it will do without injuring the potatoes, if they are planted at a proper depth, and destroy the weeds that get up generally very much before hoeing time. By these means the crop is kept much cleaner with less work than any other way that I am aware of.

ESEK WILBUR.

Maclean, 4th mo. 23d, 1842.

We have seen this method practised with much advantage, and know that it greatly facilitates the cultivation of the crop.—Ed.

TO THE POINT.—When the Mayor and Common Council of Albany, at the opening of the Western Rail Road, visited Boston and were received by the municipal authorities in due form, the Mayor said for himself and associates that they would be glad to see the city; he was a business man, and not used to making speeches.

A captain of a merchantman whose cargo was consigned to Sam'l Williams, the eminent American merchant in London, not finding such a market as he desired wrote a letter of three quarto pages for advice as to what he should do, proposing this and proposing that course. Mr. Williams' reply, very much to the chagrin of this long winded gentleman, was, "Sir, take salt and go home."

Farmers! no long talks in the morning. "Take time by the forelock."

Cure for Wounds, Galls, and Bruises.

Take one quarter pound of Saltpetre, half a pint of Vinegar, half a pint of Spirits Turpentine; put them together into a bottle, and shake up before using. Apply it to the wound with a feather, three times a day.

The above was handed us by a highly intelligent friend, who assures us that it will be found a most efficient cure for sores on horses.

The Season now, 30th May, has seldom promised better. The wheat looks finely, and grass abundant. The prices of produce are such as to satisfy reasonable men; wheat in Rochester, \$1.25 per bushel, and hay 10 to 12 dollars per ton.

For the New Genesee Farmer.

Sowing Corn for Fodder.

MR. COLMAN—In the Farmer for March, your correspondent Ledyard asks information on the subject of sowing corn, bread east, for winter fodder. I was, at first, surprised at the enquiry, but on reflection, concluded he must have been a stranger to your paper, probably just then commencing an acquaintance with it. I ask leave, therefore, to refer him to your number for July, 1841, page 109. He will there find an article on the subject, that will, I think, in a measure satisfy his enquiries. I have been for twenty years accustomed to this culture, and have there given the result of my experience. I do not feel as if I could say too much in its favor. The product per acre, on a rich soil, and in a favorable season, will be very great. I have never had occasion to ascertain with accuracy the amount. But have considered, or estimated the amount on different fields and in different seasons, to vary from five to seven tons, or more per acre. I have carried well a very large stock, rising 1000 sheep, and many cattle, far into January, with very little hay.

I would by no means suffer the corn to stand to let the ears ripen before harvesting. It should be cut when most juicy, when the juice is richest and sweetest. This will be, I suppose, at the time when the kernel has become nearly or quite full of milk. When sown 2 1/2 bushels of seed per acre, the quantity which I recommend, and from which I would not vary, it will stand so thick and the stalks be so slender, that but few ears will set. Cut up at the time I propose, it will be so extremely succulent, that it will need to stand in small stooks to cure, during the dry and hot weather; and should be put into stacks, as recommended in the article referred to above, just before the fall rains commence.

The idea suggested in the Farmer for March, page 21, "that weeds will check its growth, if the land is rich, and fill the ground with seeds," I cannot think correct. It is entirely at variance with my experience. The ground is so deeply and perfectly shaded, that I have found nothing could live or grow among it, save the Canada thistle; and this would shoot up a slender, pale, weak, and sickly stalk, unable to produce or sustain a blossom.

I have been pleased, after taking off the corn, with the condition of the ground for cross-ploughing and sowing with wheat. I recommend to sow corn early, that it may be harvested early, and thus have the full benefit of the dry and hot weather, for the process of curing the stalk. If cut late, it will be more difficult so to cure it as to secure its safety. I once lost a large quantity, supposed well cured, by stowing it away in a large and solid mow. Of course, I prefer staking it, as recommended in the article referred to above, around a pole, the length of a sheaf only from the pole, so that the butts shall all be exposed to the air.

April, 1842.

A FARMER.

Mildew on Gooseberries.

For the New Genesee Farmer.

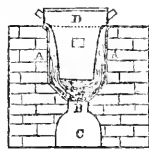
MR. COLMAN—One of your subscribers inquires how he shall prevent gooseberries from moulding. Some few years since, while passing through the Shaker settlement in Hancock, Mass., we stopped (its a gift of ours) to chat awhile with one of the brethren. Among other topics our conversation fell upon gooseberries. He said they had a very fine variety, but in consequence of their mildewing, he was going to pull them up and throw them into the street; they were useless to them. We made a truce with him for the said rejected bushes, brought them home, and put them out as we had been wroth to put out gooseberry bushes in former time. It was too late in the season to expect any good from them that year, for their blighted fruit had just fallen prematurely to the earth. The next season, however, brought

us a harvest of fruit as large and larger than robin's eggs, as clear as a quill, and as delicious as a plum or peach if you please. And the said bushes continue in good bearing ever since without any change of local habitation or name. My management with them has been to keep the earth light and rich around the roots. If moss collected on the stalk scrape it off, and cut the old stalk down once in about three years. The bushes must be kept well pruned, which is not very difficult, if you have a choice fruit, and set them where the air will circulate freely. A cold exposure is injurious to their tastes, habits and constitution.

A very dry and wet taste unfavorable to their growth, as we have, in several instances, known of their being attacked by mildew in sandy soils, also in those where rocks lay but little distance from the surface. The best we ever saw, grow in a moist loam, which was kept enriched by decayed chips.

W. B.

Mount Osceola, 1842.



For the New Genesee Farmer.
Summer Cooking Apparatus.

I furnish a description of such an apparatus; which I have found cheap in construction, saving of fuel, and very comfortable indeed for the woman who used it. Though perhaps not adapted, in utmost strictness, to an agricultural journal, cobblers and carpenters being sometimes compelled to do their own cooking, still I flatter myself it will not be excluded, while the columns of the Farmer are open to long *funnyisms* about Connecticut River letters, old bachelors' griefs, and young ladies names.

The apparatus in question, consists of an iron vessel A (represented in section,) having a large hole at the bottom covered with a grate B, firmly set in solid brick-work. This is for containing the fire. Directly beneath it is the hearth C, enclosed on all sides, except a small hole in front, 2 or 4 inches, for extracting the ashes, and for the admission of air to the fire above. To this hole is accurately fitted by grinding a piece of brick, so that the draught may be entirely cut off, when the fire is not to burn rapidly. D is the boiler, made, as is perceived, in the shape of a frustum of a cone inverted; and when set in, leaves an average space of one or two inches for the upward passage of the smoke. On opposite sides of the iron vessel A containing the fire, and the thickness of one brick from the top, are two square holes for the horizontal passage of the smoke to the chimney. The position of one of these holes, is represented by the square dotted figure. A chimney about 5 inches square and four feet high, will afford draught enough, and may then pass into a common brick chimney; or a feet of stove pipe will answer the same end. Several boilers of this kind may be connected in one mass of brick work, and then form what are termed in some of our cities *kitchen ranges*, where they are not very uncommon.

The fuel used may be small blocks of wood, chips, or charcoal. If charcoal is used, less space should be allowed between the grate and the boiler, than when chips are burned. From three to six inches is sufficient. The quantity consumed is exceedingly small. The stratum of hot air round the bottom and sides of the boiler, is so thin, that little heat comparatively escapes, acting, as it does, on a principle similar to that of Mott's Agricultural Furnace. A bushel and-half basket, filled with blocks of wood, were enough to

cook all the food of a family of four adult persons for two days. By shutting the draught, combustion continues for a long time. Three blocks of wood, of size of common half bricks boiled the dinner pot with 7 quarts of water, at 11 o'clock, after which the draught was closed, and they continued to burn, keeping the water at boiling heat until 5 o'clock for boiling. A pint of charcoal was sufficient to boil 1 quart of cold water.

The fire communicates scarcely any perceptible heat to the room, hence it is particularly adapted for summer use. Every woman (I don't mean ever lady, whose fingers never bent for household duties, every woman knows that ironing clothes, and baking griddle-cakes, is desperately hot work in summer but not so with this apparatus. With it, she may iron as comfortably as she takes her flower bed; and bake cakes, sitting in her easy chair, as easily and coolly as she writes a letter. I have seen it done.

The vessel A would be best if made of cast-iron. Mine was made of thick sheet-iron, and though the lower part burned through in a few months, yet the bricks, having been made to fit its outside, still kept the proper shape. The upper rim of this vessel, on the shoulder of the boiler, should fit accurately. Cooking-stove boilers may be used, but being shallow below the shoulder, are not so economical of fuel.

The cost of a single boiler apparatus was as follows:—

Sheet iron vessel A A.....	\$0,83
Tin boiler D.....	1,09
Grate.....	25
Brick and mortar.....	1,75
Mason work.....	87
Iron strap round the top layer of brick to keep them firmly together.....	25
	\$5,00

When the boiler is of moderate size, fuel is put in at the top, by removing it; but when very large, small door is fitted in front to shut very closely. A valve shutting the flue above the fire would be a very good thing; and the air passing thus excluded from above as well as from below the fire would keep as well as when covered with ashes.

Western New York, 1-42.

Value of an Agricultural Paper.

Extract from a private letter from one, whose intelligence and experience gives him a right to speak with authority, in Ontario county, and dated 4th March, 1842.

"I want the farmers to cast away their prejudice against reading an agricultural paper. I think they are afraid of being caught in reading something, which perchance may have been written by some one, who does not belong to their calling, in whose views the night coincide. They are not compelled to practice any information communicated, which does not commend itself to their common sense and judgment.

cannot be that the charge of fifty cents prevents the taking an agricultural paper which usually contains a single number information respecting some subject worth more than the entire cost of the paper for whole year's publication. But light is gleaming through the mist of ignorance and prejudice. The farmers are waking up, and that over-weening confidence in one own experience, possessed by many, is giving way. Many are willing to read an agricultural paper, are not ashamed to confess that they find it useful and instructive to them."

We cannot help considering this advice as sensible and sound; and therefore we recommend to those who need it, to take it. As Quakers often say of the medicine, "it won't hurt you if it does you no good. Ignorance and prejudice are extremely intractable diseases to contend with. Advancing education and the

gradual spread of knowledge, will, by slow and imperceptible degrees accomplish that which cannot be achieved by any sudden movement. That which is gained by the gradual diffusion of light and knowledge, now since the art of printing has been discovered, is sure to be retained; and "these revolutions do not backward." Men after they once become accustomed to read a well conducted agricultural paper are quite sure to keep on; and from being an indulgence becomes a necessity, like a dog whose teeth has once been fleshed in the blood of a sheep, can never be deterred of the appetite, but will be sure afterwards to be found among the flock. We wish we might thus sharpen the appetite of our readers. If an ardent devotee and much pains-taking will make our paper sensible and attractive to them, we shall confidently anticipate upon success.—Ed.

PLAN OF A BARN.

MR. EDITOR.—Not the least among the many advantages to be derived from an agricultural paper to the farming community, is that it may be a medium of information adapted to save time and money, and promote economy and convenience in giving plans of buildings. Such have been given from time to time in your valuable paper; and without further preface, I submit the following plan of a building, which I have found from experience, to be cheap and convenient, and adapted to save much labor every year. The whole is a building 36 ft. by 75, with a basement.

Fig. 1.

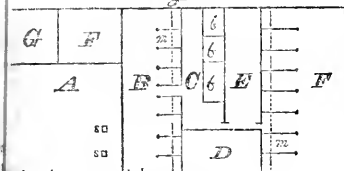


Fig. 2.

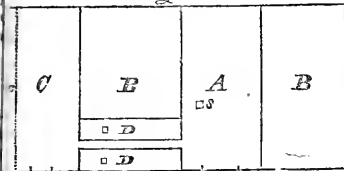


FIG. 1.—PLAN OF BASEMENT.

- A. Carriage Room, with spouts s s from granary above.
- B. Stable for horses.
- C. Meal and Grain room, with manger between that and stable.
- D. Cellar, which perhaps some would have larger.
- E. Place for sheep to eat.
- F. Cow shed.
- G. Calf shed.
- m. m. Mangers for horses, cows and sheep, communicating with the upper floor.
- s. s. Spouts communicating with granary.
- b. b. Bins for grain and meal.
- Stairs from stable to upper floor, between B. & C.

FIG. 2.—UPPER FLOOR.

- A. The main floor, s. spout to bins below.
- B. Bays.
- C. Floor with scaffold overhead, c. corn crib.
- D. D. Granary with a passage through, a and spouts leading to carriage room below.

It was wisely and justly remarked by Mr. Peters, on page 25, vol. 2, of your paper, that there should be a place for your horses and carriages, harness and grain, and hay, all under one roof if possible, and those who have it differently can hardly know how much time and labor are lost.

Here we have the same as a building 72 ft. by 75,

or as the following buildings, which are necessary for every farmer:

A carriage house 24 by 30 ft., and a horse barn 22 by 36 ft., which, built in the ordinary way, would cost at least	\$300
Sheds for cows, calves and sheep,	200
The same or more than two barns of the common size, 30 and 40,	500
Total	\$1000

The cost of this as nearly as I can estimate it, is about \$500, covered with rough boards, being a saving of \$500 over the common plan, which is worthy of consideration in these times.

But where, says one, is the saving of labor? Besides the saving of labor and time in doing my "chores," which is considerable, I leave in getting out and stacking the straw when threshing, at least two hands per day, besides a great deal of very hard labor in loading grain for market, and in conveying the oats and meal to the bins back of the stable through the spout in the middle floor.

Another item; I generally thresh my grain early in the fall and stack and mow the straw, and this leaves the middle bay for the corn which I draw in when dry and it may be husked in any weather and put in the crib, thus not only saving time but much of the fodder; and the corn can be threshed (as it should be, and ground) ready for the swine.

Yours truly,

P. PARKS.

Victor, N. Y., 1842.

Remarks.—We feel obliged to Mr. Parks for the above communication. He speaks of it as his first attempt. We hope it will not be his last, and that he will let us hear from him as often as his convenience admits of his writing.

We look upon the arrangement and construction of his building as convenient, and combining much in a small space. We think that thirteen feet do not give width enough for a horse stable; it should not be less than fifteen; there will then be room enough to hang up their harness and to pass in safety behind them. We consider seven feet for a sheep house as quite too narrow, though something must depend in regard to all these matters, upon the size of the farm and the amount of stock to be kept. We are much too strongly inclined to give too little room to our animals; and one would suppose from the construction of a large proportion of the barns built fifty years ago, that men were not to be found at that time over five feet and a half in height. We think the cellar in the plan is not half large enough, because every farmer who keeps sheep or neat stock, should always have an abundance of succulent food upon which to feed them, for the storing of which he requires a good barn cellar.

It is difficult from merely looking at a plan upon paper to pronounce with confidence upon its advantages or inconveniences. But we shall be happy to give a variety of plans, such as have been tried, or such as may suggest themselves to reflecting minds, who are endowed with a good constructiveness. We have different wants and very different notions, and very different locations in which to place our buildings, and very different uses to which to apply them. But by presenting a variety of plans and giving the suggestions of different minds, any one disposed to build may follow, select, combine or alter the different arrangements as may suit his own taste and convenience. We have known very few men to build a house or a barn, who were not obliged to confess, when it was completed, that there were some points, were they to build again, in which they should do differently from what they had done.—Ed.

Maine Report on Agriculture

The Report on Agriculture presented at the Agricultural meeting held in the Capitol, in Augusta, Maine, January 24, 1842, and signed by James Bates, Chairman, is given in the Maine Cultivator of January 22d. It is drawn up with signal ability; and in clear and a direct manner points out the most important objects of agricultural inquiry, experiment, and improvement. We subjoin some extracts, and regret that our limits forbid the insertion of the whole.

Although Maine stands unrivalled in its maritime facilities and inexhaustible water power, is rich in minerals and forests, its growth and prosperity must mainly depend upon its agricultural resources; and that to develop these and increase their productiveness are objects worthy of the best effort of its citizens and government.

In bringing forth the productions of the earth, he is the most successful agriculturist who manages and cultivates best. Whether a man cultivates a few acres or few—whether his soil be rich or poor—his precept and example are most important to his community, which makes the greatest improvement of his mind and position. The man who turns a barren plain or bench to a fruitful field, or reclaims a worthless bog, which was before only a nuisance, may do more for himself, and be of more use to his neighborhood, than he who cultivates the largest interval farm in the State. We do not feel sure that there exists a correct public sentiment on this part of the subject; be that as it may, it cannot be concealed, that much diversity of opinion exists as to the best mode of cultivating almost every variety of soil, and the kinds and conditions of manures and modes of applying them; and for want of the necessary information upon this subject, much loss of labor annually results from ill-directed effort. Men must already be in possession of facts of high practical importance; which are either not known or not duly estimated by others; which if spread before the people, would advance the interests of our entire agricultural population. Such men possess the means and information necessary for instituting experiments, which would continually aid and increase such advancement.

In order to avail ourselves of what is already known and to keep pace with improvements which are daily developing themselves, measures are required to diffuse extensively that knowledge which is already possessed by some, and well conducted and judicious experiments are needed to add to what is already known.

They believe the time has arrived when inducements should be held out for well conducted and faithfully recorded experiments.

1st. To test the comparative value of different manures as applied to similar or dissimilar soils.

2. The best mode of manufacturing manures, and the time and manner of applying them.

3. The most profitable crops to be grown on different varieties of soils, having reference to locality, market, &c.

4. The best mode of preparing the soil for, and management of, different crops.

5. The advantages to be derived from admixture of manure by supplying those constituents found to be materially wanting, or in too small proportion. The materials for doing this, existing in abundance in every part of the State. It seems of great importance to ascertain not only the best mode, but the time when, and place where, increased production will compensate the outlay of labor and expense. We doubt not the time is approaching when our sandy plains, stiff clays and stubborn bogs, will, by simple admixture, with the addition of a small quantity of lime or other alkaline substance, be rendered abundantly productive.

6. To test the comparative value of the different grains and roots to be consumed on the farm in feeding and fattening animals.

7. What animals are best suited to our climate, and most profitable in the different sections in the State.

We cannot doubt that such experiments judiciously made and faithfully recorded, would greatly conduce to the public good; and since such experiments would often require a sacrifice of expense and labor on the part of those who make them; we believe sound policy requires that inducements should be offered at the public expense, sufficient to secure the attention and enlist the efforts of those most competent to make and record them.

No mode of doing this, has suggested itself to your committee, which seems so feasible and at the same time so equal, as to offer such inducements through

We regret that the articles on Stearine from Lard, Oil from Corn Meal, and Tomato Figs. &c., from our respected correspondents McLean and Crocker, though in type, are unavoidably postponed to our next number.

Scientific Agriculture. -- Letter IV. -- Manures.

The value of ammoniacal liquor produced from the distillation of coal for gas being fully ascertained it seemed to be desirable to make a composition which besides other actions, should produce the liquor or a good substitute for it, with the additional advantage, that it should, by its very gradual decomposition, supply the ammonia slowly and in small portions at a time. Let us examine how these conditions are fulfilled in this new artificial manure. It is now admitted on all hands, that coal is of vegetable origin; in other words, that it is formed from the dense forests of the primeval ages, buried and carbonized by heat under immense pressure, and also that all vegetable substances contain a small portion of azote or nitrogen. Now sawdust is the basis of this new manure, and wood is the basis of coal, according to Liebig; also vegetable substances when decayed from humus. This sawdust is mixed with carbonaceous matters; what these are I do not pretend exactly to announce. Coal tar, as tar, is certainly injurious to vegetation, yet it may, by some process, be deprived of this property, but nearly all these carbonaceous substances contemplated, except coal ashes and anthracite, contain a certain small quantity of nitrogen. To these are added lime and soda; these two, besides their value in agriculture by themselves, according to recent chemical discoveries, when in combination, are very powerful agents to cause the evolution of ammonia; lime is so by itself. Of the small proportion of sulphur added I will say nothing, except frankly to confess that I do not at present see its value, unless it produces sulphuretted hydrogen or in some way assists the decomposition of the mass. Nevertheless, I should by no means omit it in making the trial.

Here then is an admixture containing many of the most valuable requisites for luxuriant vegetation, which, if its own internal action produces gradual decomposition, must be of much service in agriculture. One thing, however, is still wanting.—proof, extensive proof under many circumstances. That it will be extensively tested with various soils and in various situations, there is no doubt; if successful, it will be another jewel added by science to the agricultural wreath.

Reason and experience teach the undoubted value of nitrogen or azote to plants; let us now see what substances contain this, and how the farmer may procure it in the most economical way, for it is no use to explain to him the value of the gas liquor, when there are no gas works within miles of his farm.

All animal excrement, as cow and horse manure, but particularly that of man, contains a large quantity of ammonia, which is azote mixed with hydrogen gas. On the proper management of the dung heap of his own farm, the farmer has chiefly to depend.

It is now the fashion to say that fresh manure is the most valuable, that is manure previous to fermentation, as it is by this fermentation that much of this important ingredient, ammonia, evaporates into the atmosphere and is lost to the owner, although his neighbor may reap the benefit of it. But the farmer can only manure his land at certain periods of the year; therefore, even if it were best in this state, it cannot always be used fresh. Formerly it was believed that old and well fermented stable dung was the finest and richest manure that could be had, and this is now not far from the truth, although some valuable ingredients are lost, and the quantity appears to be much diminished. Let us reason on the subject with the new lights. Fermentation and heat in the interior of a large dung heap, carbonize the vegetable matters, which are then in the most extreme state of minute division; the particles being much smaller than the finest powdered charcoal, each of these minute particles is thoroughly saturated with the ammo-

nia formed in the centre of the heap, and which was prevented from escaping by the manure outside; these particles are moist and cool and packed together so closely that all further escape is prevented. On the application of these minute well saturated particles to the action of the roots, great insurance results; their contents, both of carbonic acid and ammonia, are absorbed to the plants just as they are wanted, in great plenty, and in a state of the minutest division. But it is true that much ammonia is lost, and what is lost is wasted, and must be saved. Now good loam is found on many farms, and this is an excellent absorbent of ammonia, although not so good as carbon. The intelligent farmer should therefore pay much attention in making up his manure heap, and as he lengthens the ridge by additions, should carefully cover it up with loam, which would thus absorb the ammonia that would otherwise escape, and become so impregnated with it as to form a very valuable addition to the heap. Mr. Schottman in Germany, who has the manure of about 400 horses to manage for his land, in order to save the ammonia from escaping, constantly moistened his heap with green vitriol or sulphate of iron, and as fast as it ran through poured it on again; the sulphuric acid of the vitriol or sulphate of iron catches up the ammonia and forms a sulphate of ammonia, which with oxide of iron or iron rust, remains in the dung heap. I confess I am a little sceptical on the value of this plan, but believe in the superiority of covering up, but it shews at all events that there is a general faith in the value of ammonia. The labor, to say nothing of the vitriol, would be too valuable here, and it is probable that the oxide of iron in any quantity would be injurious to vegetation. All night soil and excrements of man, must be carefully collected and added to the heap, as well as all slaughter house offal, except the fat which is of no value; these contain a very large quantity of ammonia. It is in the careful preservation of these, and no doubt in the useful practical preparation of them, that the Chinese so far excel the rest of the world. The communication of the minute details of the Chinese methods of preparing and applying manures of all kinds, would unquestionably be of the greatest interest to our agriculturists, and it is to be hoped when all the political troubles are gone by, we shall be enabled to get some insight into their practices. These substances, however, require to be used with the greatest caution; all food offered to plants, except in a state of the minutest division, is injurious to them; the Homoeopathic system suits them best, but then it must be given in great plenty and all the time they require it. Thus the ammonia in rain and snow water which, according to Liebig, is absorbed by plants, is in so small a quantity as to have, until within the last few years, escaped the research of chemical analysis; and the value of the well fermented manure mentioned in the former part of this letter, depends much on its minute division. The night soil and offal should therefore be added to the manure heap in small quantities, and spread thinly about, so that its decomposition by the fermenting heap would be surely effected. Green crops also contain ammonia, and must therefore be useful manures. There are, however, several other sources, from whence azote or nitrogen may be readily obtained in abundance. These are the class of salts called nitrates, such as nitrate of potash or saltpetre, and nitrate of soda. Your readers are already informed how extensively these are used in English agriculture, and by the last accounts, the application of them was certainly increasing.

Dumas, in his Treatise on Chemistry, states that 100 pounds of saltpetre contains as much nitrogen as 3 to 400 pounds of animal matter. These nitrates consist of nitric acid and potash and soda, respectively,

and nitric acid contains one part or equivalent of nitrogen and five parts or equivalents of oxygen; and the constituents of these substances then, are necessary to vegetation, and according to the above statement of Dumas, which there is no reason to doubt, the requisites are condensed into a small space. My own experiments with saltpetre, which were not on a very extensive scale, gave a large increase of foliage; but could not observe a corresponding increase of flower or fruit,—this, however, on grass lands would be very advantageous. Yet these nitrates, however, like the former compounds of nitrogen, must be used with much caution, as too large a quantity presented to the roots at once would inevitably destroy them; of this many instances have occurred under my own observation. With respect to saltpetre, it often comes from the East Indies considerably adulterated with common salt, as much as 5 to 12 per cent, sometimes even more, and although salt in small quantities is not injurious, yet it is by no means so valuable as saltpetre it also comes sometimes in large crystals—sometimes drier than at other times. These remarks apply to the quantity per acre; of saltpetre of fair quality about 1 cwt. to the acre, sown broadcast in the spring is considered a proper supply; but if the crystals are large they ought to be broken, as a large lump falling near a plant would prove very injurious on that spot. These remarks are equally applicable to nitrate of soda which, however, seldom comes in such large crystals and is often more damp than saltpetre. Of course the more moisture, the more water, and the less nitrate of soda in the weight, so that it will often be requisite to apply $\frac{1}{2}$ or even $\frac{1}{3}$ cwt. per acre of this latter substance. Another source of nitrogen or azote to plants is rain and snow water. Liebig states that all animal and vegetable substances which decay in the open air, give out ammonia in quantity, that when the rain descends in drops through the atmosphere, it combines with this floating and aeriform ammonia which is thus conveyed to the roots; and that in this way a considerable part of this necessary substance is provided for vegetation. It will have been observed in one of my former letters, that ammonia, although found in almost every part of a vegetable in very small quantity, still does not constitute any considerable part of the plant as does carbon, but that its use is chiefly to assist in the digestion or assimilation of the food which the plant takes up; hence we see the necessity of its being supplied constantly with this food, and in small quantities; in proportion, therefore, to the supply of food, so must be that of nitrogen and ammonia.

J. E. T.

Lectures on Agricultural Chemistry, by Jas. F. W. Johnson, reader of Chemistry and Mineralogy in the University of Dublin, Eng.

This is an excellent work and contains a large quantity of valuable information; but these Lectures ought to have been called Lectures on the Chemistry of Vegetation, rather than on Agricultural Chemistry and this distinction is drawn in order to prevent those who take it up from being disappointed in their expectation, if they think to find it full of ideas and recipes respecting the mixture of composts and the various scientific modes of tillage.

Although very far from wishing in any way to depreciate the value of the great mass of scientific knowledge, of which the rays are now accumulating to concentrate in one brilliant focus of light on agriculture the truth is the numerous recent publications on this subject render it quite clear that before this knowledge can attain its desired practical force, either the farmer must become more of a chemist, or the chemist more of a practical farmer. When this union of character and pursuits shall have taken place, then, and then only, shall we be able to pass just sentence on most of the theories recently put forth by scientific men.

In the mean time it is quite delightful to see with what zeal and energy, with what care and calculation, men of science institute accurate experiments to elucidate particular points, and to extend their knowledge on the subject of agricultural chemistry; and as directing posts to the agriculturist, those experiments are of the greatest importance; but in order to understand them, to draw proper inferences and deductions from them, or to vary the application of their principles to varying circumstances, such as situations, soils, crops, manures, &c., the farmer must brush up his knowledge, must cultivate his mind as well as his field. Let him rest assured that in both cases the crops, in profit and pleasure, will be in proportion to the labor bestowed. The chemical statements and calculations or, as we ought to call them, the chemical statistics in this work, appear to be exposed with much simplicity and accuracy, considerable industry has been likewise expended in drawing information from the latest and most authentic sources of knowledge on the subjects discussed in each lecture.

The first lecture contains an account of the nature and known properties of the four chief ingredients of all the vegetation around us, Carbon, Oxygen, Hydrogen, and Nitrogen or Azote.

The second lecture discusses on the substances organized out of these ingredients, of which the vegetable is composed; and their relative proportions in various plants.

The third explains the properties and relations to vegetable life of carbonic and oxalic acids, and of ammonia.

The fourth gives the probable sources of the ingredients mentioned in the first lecture, with various conclusions drawn.

The fifth, an account of the general structure of plants, with the functions of their leaves, stems, roots, bark, &c., and of the various circumstances by which these functions are modified.

The sixth describes the substances of which plants consist—such as woody fibre, gum, starch, sugar, &c., with their mutual relation and transformations, and considerations on the acids in plants.

The seventh is on the chemical changes which take place during the germination of the seed, development of the leaves, roots, flowers, fruit and seeds, and the circumstances by which they are promoted.

The eighth and last, is on the theories recently propagated of the chief supply of carbon and ammonia to plants from the atmosphere, and on the various means by which carbonic acid and ammonia are constantly supplied to the atmosphere to make good the large quantities constantly abstracted by plants.

Here is also an appendix of 40 pages containing the results of practical experiments in agriculture, with suggestions for experiments.

From this brief analysis of the work, it will be seen that the information it contains is of a varied character, and it certainly offers to notice many facts which deserve to be deeply studied by every agriculturist. In pages 146 and 147, there is a very singular result given as of frequent occurrence in Holstein—it is, that in contiguous fields, some of which are manured with man and some left unmanured with man, the crops in the unmanured fields are worse than if the whole fields had been left unmanured, which is just like saying that the healthy crops on the manured lands appropriate to themselves a larger portion of the nourishment from the atmosphere of the unmanured (carbonic acid and ammonia), while the weak crops of the unmanured fields are obliged to put up with the smaller quantity left by the others, for their support. If this be true, and we see no reason to doubt it, as it corresponds with theory, then the farmer who manures his land well and keeps it in good heart, obtains from the atmosphere a large portion of the nourishment contained in it, which

would have gone to his neighbor's crop had it been equally well manured. It is hardly possible to imagine a fact more calculated to give rise to emulation in manuring land than this, and the most delicate conscience could hardly find it an injustice to appropriate to itself the carbonic acid and ammonia of its neighbor's atmosphere, by highly manuring the land. How vastly puzzling to the lawyers, were the farmers to bring actions at law against their neighbors for the abstraction in this way of the atmosphere on their different farms!

In this work there are many confirmations of the truth of facts strongly insisted upon by Liebig, particularly that of the existence of ammonia in almost all vegetables, and the probability that much of it must have found its way there from the ammonia of rain and snow water, although not to the extent supposed by Liebig; for Mr. Johnston states in his last lecture that much of the ammonia combined with rain and snow water, must find its way in its natural descent, as well as by means of rivers, to the sea, and there be engulfed,—there being, as he states, no process by which this ammonia can be restored to the atmosphere. In this point, however, he is in error, or probably he has not heard of the experiments of Mr. Aime, Professor of Physics in the French College at Algiers, which proved that large quantities of gas were disengaged by marine plants (sea weed) from the salt water, which gas contained from 15 to 83 per cent of Nitrogen and the remainder Oxygen—the percentage of nitrogen depending on the time of the day when the gas was disengaged, the bubbles of gas disengaged before sunrise containing the largest quantity, those after sunset the smallest; several new facts are also added to our knowledge, such as that the hydrogen of the ammonia is useful to the growth of vegetation.

The accounts in the Appendix of the experiments with various substances used as manures, such as sulphuric acid, gypsum, saltpetre, nitrate of soda, sulphate of soda, charcoal, salt, ammoniacal liquor, &c., &c., are of the greatest interest, and should be spread among farmers through the different agricultural periodicals in the greatest profusion. But they ought to be accompanied with remarks on the condition of these experiments, many of which seem altogether to have escaped the notice of the experimenters. Thus a soil of stiff loam holds moisture and ammonia with much more tenacity than a sandy dry soil: hence in the latter, any solutions of ammoniacal liquors, or nitrates, or other substances, require to be applied in a weaker state and much oftener than in the former. It must also, not be forgotten, that the solution of ammonia which nature presents to plants in the form of rain and snow water, is in so weak a state that our chemical tests will hardly discover it—and that if this ammonia is given in strong solutions it is more likely to injure than benefit the crops. Now all ammoniacal liquors from gas works are of varying and uncertain strength: therefore, unless this strength were known pretty nearly, the result of the experiment would hardly be a fair guide for others. The strength of various applications is an object of the greatest importance in experiments, as is also the nature of the soil and the kind of crop. Another remark may also be of service. The saltpetre imported from the East Indies is usually adulterated with a mixture of common salt, from 5 to 20 per cent, and also with sulphate of potash. Now in experiments the refined saltpetre should either be used which is free from these admixtures, or the saltpetre, if used as imported, should be analysed to ascertain the quantity of them. The nitrate of soda is probably less liable to these adulterations. In the appendix are also many suggestions for experiments, which are of considerable value. Altogether, it is a work well worthy the study of the practical agriculturist, and if there are many parts of it which he cannot at first understand, this study will elevate his ideas on the subject, and enable

that desire for knowledge in his mind which will urge him forward in acquiring it, until those parts which at first puzzle and confound, will appear to him quite simple and clear. It is a great advantage to the agriculturist in reading such works, that he lives surrounded by the means of testing its principles, that such operations are his daily occupations and the observation on them is daily before him; so that if he employs well his powers, but a season or two can elapse before he himself will be a better judge of what is there laid down than the writer of the book himself. J. E. T.

Care of Apple Trees.

Mr. Emory—Traveling through the United States, in 1840, '41 and '42, I observed the apple trees were become very scrubbed, and many of the apples inferior in size and flavor. The inhabitants ascribed these effects to the apple tree worm. I believe they are all mistaken. Why do they not destroy the worms; it is very easy to be done. Lime water, or strong soap suds, thrown on them will give them a quietus. I am, however, certain the defect is owing to no other cause than lopping the trees in the month of March and April. Let them alone until after they are out of blossom, and then from that time, until the leaves fall, trim and lop them. If you are doubtful of the good effect of this treatment, try one or two of the worst trees in your orchard, and you will see a great change in them in less than two years. Instead of putting out suckers, as it is generally called, the trees will grow smooth and thrifty, and the fruit become smooth and fine, with a great increase in size and flavor. I have tried the experiment, and found it to succeed beyond my expectations. The best manner I ever found for an orchard is to draw fresh earth from a distance and throw a few shovels full carelessly near the root of the trees, but not to touch the trunk.

If you think this hint worth a place in your useful paper, perhaps some one besides myself may try the experiment. Apples are deemed by many a worthless crop since the temperance societies have been established. As cider is going out of fashion, try how your horses, cows, and swine will relish a feed of those sorts you used to grind up for cider. Apple trees in general, produce the greatest profit for the labor, of any crop produced on a farm, and if well attended, will pay 50 per cent clear gain, on all outlays.

B. K. DODGE.

Premiums for Wool Shearing.

In England, Sheep Shearings are made the subject of spirited competition and premium. This is a capital plan. Premiums are awarded to those, who perform the work of shearing in the best manner, and in the shortest time; and also do up the fleece in the neatest and best style. Five sheep in general constitute a trial for one adult person. Three sheep to boys between 14 and 16 years old. Two sheep to boys under 14 years old. The highest premium noticed is £3 stg.—the lowest £1 stg.—but a gratuity is bestowed upon the unsuccessful competitors. This would be an excellent subject of competition with a farmer's club in the same town, or one made up of several towns in the vicinity of each other; and now grog money has ceased to be demanded, it would not be difficult to make up a purse. After the play the farmers dine together. This is always, in such cases, a comfortable and desirable accompaniment, where the expense is within the reach of the humblest individual.

SNAKES.

Those who are in the habit of destroying snakes, had better let them alone for a few years, as they are early risers, and generally at work in our field by the break of day, picking up those little depredators, the corn worms, which any person may see by going into the corn fields as early, and may satisfy themselves. B. K. D.

Transactions of New York Agricultural Society.

We are indebted to the politeness of our friend Luther Tucker, of the Albany Cultivator, for "The Transactions of the New York Agricultural Society, published by order of the Legislature." The volume has been got up under the superintendence of the Recording Secretary of the Society, Henry S. Randall, of Cortlandville, and does great credit to his intelligence and good judgment. It contains a large amount of highly valuable matter, and may be considered as an important step in the advancement of a Society destined, from its position, the zeal which gives it impulse, and the intelligence which it combines, to exert an efficient influence upon the agriculture of the whole country.

The volume will be extensively circulated through the State, but as many of our readers can scarcely expect to become acquainted with it excepting through our columns, we propose to go through the book, making such selections and notices as we deem interesting and bearing most strongly upon practice.

To the honor of New York, she has not been backward in giving to the country several valuable publications on the subject of Agriculture. We regret that in this case we cannot refer to dates, but they are not material in relation to the facts. She early instituted an Agricultural Society, which, under the care of Chancellor Livingston and M. L. Hommedieu, and other eminent coadjutors, gave four valuable quarto volumes to the public, containing discussions and information in relation to several important subjects of agricultural inquiry and experiment. Her Legislature afterwards, under the direction of Mr. Featherstonhaugh and Mr. Buel, published three octavo volumes of agricultural essays and communications, which we have always regarded as among the very best papers ever given to the country. In the mean time, one of her distinguished citizens gave the public an important treatise on the Management of Sheep, mainly translated from the French; and another, a Treatise on the whole subject of Agriculture, which, for the amount of useful information, compressed into a small space, is surpassed by no book within our knowledge.

The Albany County Agricultural Society about this time likewise published several useful tracts; but their publications were soon interrupted, for reasons of which we are not apprised. Then came along the Plough Boy, printed at Albany, which we have had no opportunity of examining, but which we believe was mainly intended for a Farmers' paper. To this succeeded the Genesee Farmer, edited by Luther Tucker; and after that the Albany Cultivator, under the care of Judge Buel, and since his lamented death transferred to the very able editorship of Messrs. Tucker and Gaylord. It may be said with no disparagement to any other publications in the country, that more intelligent, useful, and able periodicals than these two papers have been, and the latter continues to be, have, so far as our knowledge extends, been produced in no country. At the demise of the Genesee Farmer by the removal of its principal editor and publisher to Albany, the New Genesee Farmer made its appearance at Rochester, and for two years the strong approbation with which it was received, evinced the ability with which it was conducted. Now, in its third volume, having passed into the hands of a particular acquaintance and friend of ours, we feel some reluctance in saying what we think about it; but we may be allowed to add that we hope something from the lad's industry and good will in the cause.

In the city of New York at the same time were published the New York Farmer, edited by Samuel Fleet, and the New York Quarterly Farmers' and Mechan-

ics Magazine, which latter proceeded to four volumes octavo, but was in the main a reprint of the former; both of them full of valuable information and useful suggestions and essays.

This has been followed by the Farmers' Library, a republication of several valuable foreign works, in monthly numbers, by Mr. Fleet. The Silk Worm, likewise, devoted to the Silk Culture, and published at Albany, reached several numbers under the editorship of Mr. Blydenburgh.

The Journal of the American Institute, under the care of Mr. Wakeman of New York City, gave many of its monthly pages to agriculture.

The Central New York Farmer, under the able editorship of Mr. Johnson, and published monthly at Rome, N. Y., and the United States Farmer and Journal of the American Institute, opened with the present year, and are doing good service to the cause.

A new conditor is now added to the great cause in the American Agriculturist, of which we have been favored with the April number, published monthly in New York City, 16 pages octavo, at one dollar per year, edited by A. B. & R. L. Allen; and promising from what we have seen, efficient and intelligent aid to the improvement of our Live Stock in particular, and the general interests of an Improved Husbandry. We most heartily wish their success.

In addition to these, Messrs. Wiley & Putnam of New York, bookseller and publishers, have issued several highly valuable publications on Agriculture and Horticulture, and design to keep the press warm.

In the production, therefore, of agricultural information and knowledge, New York may justly lay claim to the credit of having contributed no inferior share. We trust she will continue to go on in this important career every year with increased spirit and intelligence. Agriculture is her great interest; here her resources are immense; and we had almost said it may require centuries fully to develop them. Every forward step in the subjugation of her uncultivated territory, in the improvement of that which is already subdued, and in the increase of her productive powers, must essentially advance her prosperity, her wealth, her independence, and, above all, the general comfort of her rapidly increasing population.

The volume commences with a general history of the New York State Agricultural Society; the Cattle Show and Fair at Syracuse, and the proceedings of the Society at its annual winter meeting in Albany, with the address of Mr. Nott, the President of the Society, on that occasion. These have been already given to the public through our own columns and those of the Cultivator.

These are followed by the Reports of several of the County Societies, of their condition, prospects, and the use they made of their funds and the bounty of the State. Societies were organized in thirty-two of the counties of the State, but only nine have made returns of their proceedings, and these returns are very partial and imperfect.

Tompkins County.—From the return of the Society of the County of Tompkins, reports are given on the subject of Live Stock and the cultivation of Corn and Beets.

The report on Live Stock highly approves the Improved Durham Short Horn. For size and symmetry, for early maturity and an aptitude to take on flesh of the best quality, as well as their production in milk, the committee pronounce decisively upon their superiority; but they have some hesitation in recommending them for oxen.

From the style of this report we are inclined to regard it not so much the result of actual observation and personal experience, as of general and popular impression. We have seen only one yoke of pure full bloods, but we have seen several pair of half bloods,

which were powerful, quick, and perfectly well trained, and we know no reason why they should not make as good oxen as any.

The committee proceed to denounce the Yorkshire breed, by some persons mistaken for the Durham, as a race by no means to be esteemed. They fat poorly; do not follow well; their meat is not good and they are bad milkers.

In some parts of the country this kind of stock remains; but they are not approved. The farmers in Tompkins are certainly not alone in this decision.

Crops.—Four crops of corn are reported to have been presented for premium. Three kinds are mentioned as having been cultivated.

The Dutch, planted in hills four feet apart each way gave 113 bushels of corn and three tons of fodder to the acre.

The Brown Corn produced 105 bushels of corn and two tons of fodder.

The China Tree Corn produced 90 bushels of corn and four tons of fodder.

The Brown Corn, but for some mismanagement, it was thought would have produced the largest crop. The China Tree Corn is pronounced too late for our climate. The mode of harvesting was by cutting up and stacking, when sufficiently glazed.

A second account is given of producing 92 bushels of corn per acre.

This was on a clover lay manured the previous season. The account of cultivating this acre is thus stated:

92½ bushels of corn at 50 cents,	39,25
Two loads of stalks at 2 dollars,	4,00
	<hr/> 50,25
Expense of cultivation,	14,05
Use of land, profit, &c. &c.	<hr/> \$36,20

Sugar Beets.

One plot of ¼ acre yielded at the rate of 790 bushels per acre.

On plot of ¼ acre yielded at the rate of 596 bushels per acre.

One plot of ¼ acre yielded at the rate of 502 bushels per acre.

Orange County.—The Report of the Orange County Agricultural Society is only remarkable for Mr. Bull's account of his method of raising calves. This is certainly high authority, as who should know better than he?

The Orleans County Agricultural Society report a premium on a crop of Corn of 112 bushels and 30 quarts per acre:

And of potatoes of 700 bushels per acre.

The potatoes were planted upon a low piece of "rich mucky ground never before planted, and had been used for a hog pasture two years previously." The potatoes were planted "close together one way and about two feet and a half the other." This account is not remarkably definite, and the mode of measuring is not given; this we should have been glad to have known.

The corn succeeded corn on the same land; and the preparation was merely splitting the hills of the preceding crop and turning a buck farrow and planting in the ridge. No manure was put on the land. "It was a lowish piece of ground inclining to muck. Two bushels of plaster were used upon it." We should here likewise have been glad to know how the amount of yield was determined, at what season it was ascertained, and in what mode the plaster was applied.

BUTTER.—To these statements is subjoined an account of a mode of making butter, which being thus presented by the Society, we infer is approved by them. They state "that milk set in wooden keels or tubs will probably yield the most cream, but not the

sweetest." Why it should yield more cream than in tin pans we shall certainly undertake to give no reason, until we know the fact, which at present we distrust. The sweetness of the cream will depend, we believe, upon the dairy milk, upon plenty of water among the pans, and somewhat upon the use she makes of her elbow-joints. He advises to take three-fourths of an ounce of good loaf sugar to a pound of butter—this we utterly protest against. The butter is injured by the application of any thing but the purest salt.

The contributions for premium in Oneida county are highly liberal, amounting to 678 dollars—from the state \$255—from subscriptions \$423.

Niagara County Society. Indian Corn.—A premium on a crop of corn of 103 bushels 44 pounds to the acre, and for a crop of oats of 92½ bushels per acre. No account is given of the mode of cultivation; but we have another account of a premium crop of corn of 71 bushels per acre and six hundred pumpkins on the same land. We think it quite too late in the day to give a premium on 71 bushels of corn, unless there is something peculiar or extraordinary in the cultivation. We should be glad to know the opinions of farmers on the expediency of cultivating either pumpkins or turnips with corn.

Washington County Agricultural Society takes the lead of all others in regard to crops; and announces the largest crop of corn ever recorded in the country within our knowledge.

Job Eldridge produced 132 baskets of corn on an acre, each basket 15-32 bushels strict measure, which if there be no error in our reckoning, would be equal to 173 bushels 6 quarts to an acre. This statement will be received, we apprehend, with some incredulity; and we can only express the wish that it had been more fully certified. We do not deny its possibility, for we have not reached the end of our line yet; but, but, but,—we should like to have done it, or to have seen it done.

To Peleg Sherman likewise was awarded a premium for 896½ bushels of potatoes on an acre. This was a magnificent crop; but the committee are careful to express in a note their chagrin at the imperfect manner in which the amount of crop was verified. The mode of measuring, that in finding that six hills would make a bushel, and then counting the number of hills on the acre, is altogether uncertain and objectionable. We should be very glad to know how they arrived in the case by such a mode, to the fractional excessness of two thirds of a bushel.

We do not, however, deem the statement absolutely incredible, as we have the assurance of one of the best farmers and best men in the country, that he assisted in the cultivation and harvesting of 4000 bushels of potatoes from five acres of land.

Eight premium crops are mentioned in this case, but with the exception of Mr. Sherman's statement in a note, no account whatever is given of the modes of cultivation. To know how a thing may be done seems in these cases to be much more important than the simple fact that it has been done.

We shall pursue the examination of these papers on a future occasion.

Wool Growing.

The subjoined article is from the Boston Cultivator of June 4th, whose editor, H. G. Meriam, whether his views be right or wrong, is entitled to the highest credit for the ability and zeal with which he advocates what he deems the best interests of the Farmer. We are not prepared to enter upon this subject at this time, but the facts which are stated here certainly deserve the most serious consideration. It is obvious how difficult it must be under any protective system, to adjust harmoniously and satisfactorily all the diver-

sified and conflicting interests, where, in respect to many of them, one can live only by eating up an other.

Facts which have recently come to our knowledge, make it our duty to call the attention of the public and our legislators to the condition and prospects of our wool growers. Wool growing has already become a great business in the United States, millions of capital are already invested, the resources of this vast country, especially the far west, have not as yet begun to be developed in Sheep-busbandry—though our annual wool product now exceeds fifty million pounds, and has been worth about \$20,000,000. The number of Sheep in Vermont exceeds thirteen hundred thousand—in New York, five millions three hundred thousand—in Pennsylvania, three millions three hundred thousand, and in Virginia, twelve hundred thousand, and in Ohio, nineteen hundred thousand.

Now what are the prospects of this vast and growing business of the country? It is evident to every man of sense, that the whole depends upon an adequate market. We have before said, that the wool growing business was already nearly ruined by the importation of foreign wool admitted duty free, such as come in competition in our own market, with our wool of a medium quality. In this we were grossly deceived—we should have said such as come in direct competition with our wool of every quality.

We have before us now on our table, six kinds of wool, imported duty free, from South America, finished in samples by one of the largest importers in the United States, which actually cost in South America from 3½ to less than 8 cents per pound, and therefore all admitted duty free.

The 1st kind is a long coarse wool about 7 inches in length, and about as fine as the wool of our coarse long wool sheep, and such as is manufactured into carpets, worsted, coarse blankets and negro clothes—and comes in direct competition in our market with the wool of our Bakewell and other coarse long wool sheep. This sample is very white and clean and may be afforded for 12½ to 16 cents per pound.

The 2d kind is a coarse wool of a finer grade, full as good as the wool of the best of our old fashioned common sheep, and is admirably adapted for a middle grade of broadcloths, cassimeres, woollens, and common blankets. 1200 bales of this wool were imported into the port of Boston, last week, duty free. If this wool be sold at 16½ cents per pound, it will afford the importer over one hundred per cent. profit. This wool by comparison is full as fine as the wool we took from a half Dibley and half Irish corset ewe but quite so long, and may be made as white as the driven snow, by washing alone, as we know by actual experiment.

The 3d is full as fine as our best half blooded merino wool, and may be cleaned, as the importer told us, from 1½ to two cents per pound, either by hand or machinery. This wool is good enough for the second grade of broadcloths, cassimeres, flannels, and the first class of suitings, and may be imported so that it will not cost the manufacturer, when perfectly cleaned, twenty cents per pound.

The 4th, same grade, full of burrs and dirt, may be cleaned for two cents per pound, and may be purchased abroad at the lowest rate above stated.

The 5th, is a sample of wool of about the same grade as the above, short and fine, cleaned in South America, very white and clean. We were surprised when the importer assured us, that this very wool was imported duty free, and cost in South America, positively less than 8 cents per pound.

The 6th is very similar to pure merino wool, and the sample which we have washed in hot soap suds, has become beautifully white and clean. This wool compares well with some samples we have from the Hon. Isaac C. Bates' flock, and others of the western part of this State. So fine was this wool, that when compared with Mr. Bates' wool, we were unable to decide which was the finest, and so we called in a third person, who declared Mr. Bates' a little the finest, but the difference was trifling. This wool was imported duty free, while the very cloths manufactured from this wool, by the compromise act, have been protected by a duty ranging from 50 to 21½ per cent, down to June 1842. Is this the justice our public men render unto the farmer? If so, tell us what you will call injustice.

Our annual product of wool is just about equal to our annual consumption, and under a just tariff giving the farmer an equal protection with the manufacturer, sheep husbandry would expend equally with our manufactures, and the farmer grow rich equally fast.

Much of South America is very favorable to sheep husbandry. One hundred sheep may be raised there

as cheap and easy as ten in New England. They may graze the year round in cheap pastures, and are consequently less subject to disease, and seldom die except from severe storms and old age. Aware of these facts, enterprising men from New England and other parts of the world have gone out to South America, and engaged largely in wool-growing, and who, by judicious crossings, have produced the fine wool of which we have spoken.

These facts have led us to alter our views in relation to the amount of duty proposed to be put on this wool *imported duty free*. The Hon. Isaac C. Bates' wool, being the clip of 1841, is now stored and unsold in the city of Boston, and if we are correctly informed, cannot now command an offer of one half so much as it sold for four or five years ago, so great has been the improvement and increase of South American wool, and the facilities for cleaning it. The twenty per cent duty proposed by the Secretary of the Treasury, on these wools, purchased at less than eight cents per pound abroad, will not save our wool growing farmers from absolute destruction and ruin, and cannot fail to prostrate this department of agriculture throughout the United States. For what does 20 per cent on wool, which costs in South America 5 cents per pound, amount to, as a protection of our wool growers, against this immense and now ruinous competition. One dollar on 100 pounds—just nothing.

The Secretary of the Treasury is certainly mistaken, when he estimates the annual amount of this wool imported, at 9,303,992 pounds, for there was imported into the port of Boston alone, in 1841, by an actual account, which we obtained from the vigilant collector, 6,558,957 pounds, and are assured by an extensive importer, who is thoroughly acquainted with this whole subject, and the amount of importations in New York, Boston, Philadelphia and Baltimore; and he says there is as much imported into New York as Boston, and that the annual and increasing importation, is from 15 to 17,000,000 pounds per annum. This accounts for the great glut and falling of prices in the wool market.

That this subject may be understood at Washington, we shall send on a card containing each kind of wool of which we have spoken, also the sample, which we were told was from one of the fleeces of the Hon. Isaac C. Bates' flock—one sample from Mr. Strong's flock, to some Hon. Senator, with a particular request that he shall exhibit it to his colleagues, and thus we shall soon know who there are the worthy of the votes of farmers, or true to the great and leading interests of the whole people.

Baltimore Wool.

Transactions in wool to a considerable extent have taken place during the week, among which we note a sale of 10,000 pounds Saxony and Merino fleeces, cleaned, at 26 cents, 6 months. Sales also of three quarters to full blooded Merino at 33 cents on time, and of unwashed at 16 to 18 cents. We note sales also of washed Native to quarter blood Merino, at 20 to 28 cents, as in quality.

Productive Sheep.

A black full ewe, sixteen years of age, the property of Mr. Tyson, of the Old King's Head Inn, Broughton in Furness, has within the last fourteen years reared and reared no fewer than twenty-nine lambs! namely, one when two years old, and each succeeding year since.—*Eng. paper.*

Large Fleeces.

Two fleeces of wool shorn this year from Merino Bucks owned by Jesse Harron, Ogden, Monroe Co., of two year's growth, weighed together 23½ lbs 13 oz.

One fleece from a Merino Buck owned by Mills Landon of the same place, of one year's growth, weighed ten pounds.

The above wool was of fine quality, washed and neatly done up.

NEW YORK MARKET, Saturday, June 25.

FLOUR—A sale of 500 bbls good brand Genesee, was made at \$5.57½. Shipers are willing to take large lots at that rate, but cannot find them. The East demand is limited. W. quote Genesee \$5.57½ a 54; Ohio flint, 5.57½; round Michigan 5.57½; Troy 5.57½ a 6. A sale of six flat-bump from store was made at 5½. Southern is very inactive.

GRAIN—The market is very sensibly supplied, and is consequently dull. Small sales Northern wheat at 2-2½ cents, measure, and New Orleans at 55, weight. Oats 39 a 40c. Rye scarce; none sold.

CINCINNATI, June 20—Business in the produce market remains dull—produce of all kinds very low. Pork sells for \$8-10 a \$7 per barrel—Flour \$3.75 a \$3.75 1-2—Wheat 13c per gallon. No sales of note for the past week.

Threshing Machines.

We give below the opinions and experience of two respectable farmers on the subject of Threshing Machines; and we add to this an account of a Threshing Machine invented and used in New Hampshire, from a correspondent who has no pecuniary interest in the machine, and whose statements may be relied on. We regret that it is not in our power to refer to the Family Visitor as he suggests, and we much wish that we were able to give a drawing of the machine.

We have an entire sympathy in the views of Y. in regard to the trouble and inconvenience of having a travelling machine brought to the farm; and we cannot discover much error in the calculation of F. We are not, however, disposed to go back to the old method of threshing by flail; at least where any considerable quantity of wheat is grown.

With Y. we recommend to farmers to purchase among themselves a machine for their own use, and to help each other; or as the current term is, "change works." We are not prepared to say what is the best machine or horse power. With Lane's patent horse power, where the horse moves in a box on iron rounds upon an endless chain, we were not well satisfied. It was not always easy to find a horse that would go in it; and we had frequent accidents both to the horse and the machine. Of Pitts' machine we thought well, though we should prefer to have the two operations of threshing and cleaning the grain, performed separately. Page's (of Keene, N. H.) horse-power is an improvement upon Lane's, as the horse goes upon wooden "treddles." Of the two machines recommended by our correspondent Y., we know nothing beyond his account. A machine, including horse power and threshing machine, is made in Hilledale, in the eastern part of this state, which is afforded for 75 dollars, and which, with four men and a boy, and a yoke of oxen and a horse, or two horses, will thresh one hundred bushels of wheat per day. This is an excellent machine, easily set up and transported from one place to another; but the particular name by which it is designated we could not learn. It is much used and approved in that neighborhood, and by the farmers in the parts of Massachusetts adjoining. The machine referred to by Mr. Lyford, is certainly remarkable for its small cost. We have seen a machine for threshing capable of being transported in a one horse wagon, and the cost of which was comparatively small, by which two men, it was confidently stated, could thresh fifty bushels per day. We saw it in operation, and we know no reason to doubt its efficiency. This was afforded at a low price.

The evil of getting out our wheat all at once, or immediately upon harvesting, does not appear to us so objectionable as to our correspondent F. Because it is threshed and cleaned, it is not necessary that it should be marketed immediately, where a farmer has proper arrangements for storing it. But it is very desirable always to close up such accounts as early as may be, and at least to have the article in a condition to take advantage of a demand as soon as it exists. The objection that the use of threshing machines deprives the poor of employment, is of that kind, which would at once put a stop to the use of any and every labor saving machine whatever.

For the New Genesee Farmer

Threshing Machines.

MR. COLMAN—Having for many years been interested in the Foundry business, my attention was necessarily brought to the various inventions for threshing grain; and since I have commenced farming, I have become convinced that the system now obtaining generally throughout the country, is radically wrong. The system I speak of is the employment of traveling machines, whose owners travel the country and thresh

at a certain price per bushel. It is attended with so many difficulties, troubles and vexations, that it should be exploded in all the wheat growing regions.

Permit me to enumerate some of which, that in my brief experience, appear like a fearful catalogue.

When you are ready to have your grain threshed you are dependent on the pleasure, engagements and location of some machine, which travels in your district of country, and which, like bad weather, comes when it gets ready; or when your turn comes, or when it has finished all of its large and profitable jobs. When the machine arrives, as their interest is to perform the work in the least possible time, you must be prepared with from 12 to 14 hands, the machine must be driven with at least six horses, and such a hurricane of hurry and confusion commences, that it is impossible to do justice to your work. To expedite business, the machine is left to run so open between the cylinder and concave, that the grain is passed through in cart loads, and is not half threshed; and it is impossible to clear and dispose of the straw in a clean and proper manner.

If some part of the machine fails, as is not an uncommon occurrence, your whole army of hired men and teams are idle on your hands until it is repaired, overrunning your garden, orchard and meadow patch, as they are generally a wild set, and what is worse, will rarely work without a plentiful supply of the fire water, unless they know you are conscientiously pledged against this pernicious practice.

If you have a lot of oats, spring wheat, or barley, that cannot be threshed on the same floor, at the same time, it is evident that the flying dragon cannot wait for the cleaning up of the floor, and they cannot afford to come back again without the lot to be threshed is sufficient to pay for the trouble and labor of moving and setting up the machine; consequently, you must hammer it out with the flail, which, in these labor saving times, is not to be thought of.

I have given you the *bare* of this practice, now for the *antidote*. Every farmer should own his own machine, or let two or three join in the ownership. In my humble opinion, the great desideratum would be a *two horse power*. Why—because every farmer has two horses, but every one has not four, and every farmer has men and boys enough about him to work it. Then, sir, he can with his own machine, his own team, his own hands, and at his own convenient time, do his work to his own satisfaction.

The machinery is consequently light and portable, so that if he has a small lot of spring wheat, late oats, peas or barley, for which he has no convenient place to house them in, why he can bring his machine to the barn and dispose of them at once; or if he wants some seed wheat, and has not time to get out his whole crop, or if oats are high priced as they often are just before the new crop comes to market, why he can rattle out his whole crop in one day. Can he realize any of these conveniences from the travelling machines?

The machine being a light affair, it can easily be brought into the wood yard, a buzz saw rigged to it for cutting the winter's wood, or be attached to a straw cutter, grindstone, root cutter, or grain crusher.

Such a machine, with six men and boys and two horses, will conveniently thresh from 75 to 100 bushels of wheat in a day, and should cost about 100 dollars. It should be simple and compact in its construction; the threshing should not occupy more space than an ordinary grindstone with its frame, and the length of the cylinder from 20 to 24 inches and 16 inches in diameter. The length of the cylinder regulates the amount of power or the number of horses required to drive it.

Almost any of the horse powers now in use may be

used successfully with two horses, if the length of cylinder is reduced.

The only machines that I am acquainted with that comes within these requirements, are one made by Ackley of Rochester, and one by Douglass of Skaneateles, who is the original inventor of the *spike machine*; both machines have the strength to stand the power of four horses; but from their lightness and compactness of form, are peculiarly adapted to the two horse threshing. The Ackley machine costs little more than the other, and is of the best workmanship. They are both on the *sun and planet wheel* principle, and work with great ease and safety. Y.

FRIEND COLMAN—I wish to say a few words to the farmers, through the medium of the 'Farmer,' upon the use of threshing machines. Much has been said and many have supposed that threshing machine have been a great benefit to farmers; that they have not, it is my intention to show. First, threshing machines have been a great disadvantage to laboring people. In many places poor people now have no employment in the winter months, and to farmers themselves it is of no advantage. The majority of farmers do not calculate to raise over 300 bushels of wheat annually. This may be set down as an average quantity. To thresh this amount, including the setting up and taking down the machine, takes at least two days, with from four to six horses and ten hands. Two of the horses and two hands, are usually found with the machine. The hire of the other horses, together with the owners of them, two days, may be set down at \$3, pay of the other seven hands two days at 75 cents per day, \$5.25, add to this the use of the machine, at five cents per bushel, (the usual price) on 300 bushels, \$15, making \$23.25. I will now estimate the cost of threshing 300 bushels by hand. A common thrasher will, during the winter months, thresh eight bushels per day. This, at fifty cents per day, the probable price of labor during the winter months, will be \$18.75. Leaving a balance of \$4.50 in favor of threshing by hand. A still greater objection to them is, that it crushes farmers' thresh their wheat all at once and send it to market, thus filling the market beyond the demand and depressing the prices. Such has been the case for the last few years, consequently the price of wheat has been low and little return for it.

Yours, &c.

Greece, N. Y., 1841.

MR. H. COLMAN—At your request I now give you a description of Hubbard's Horse Power and Threshing Machine.

The horse power consists of a light wheel, usually 4 feet in diameter, connected with a shaft 7½ feet long or long enough to permit a horse to pass under it, having an iron gudgeon in each end. The shaft is set up, varying from perpendicular to 20 degrees, to accommodate the band running from the wheel to the thrasher, which may be set higher or lower than the wheel, as the case may require. The wheel is near the top end of the shaft. The gudgeon at the top end of the shaft, runs in a box at the junction of two braces made of light poles, and having their opposite ends, when the power is in operation, fastened with screws to the posts of the barn doors, or any other posts or timbers set up for the occasion. The lower gudgeon runs in a box in a small sill made fast to the ground. On the same shaft and 2½ feet from the lower end, is placed a pulley deeply grooved, 16 inches diameter in the bottom of the groove. Thirty five yards from the foot of the shaft there is placed a pulley horizontally on an iron spindle placed in the ground, (a common iron bar usually answers the purpose,) braced at the top. The power is then put in operation by placing a band round these two pulleys drawn suff-

ciently tight to operate. For this purpose a rope 1½ inches in diameter is ordinarily used. Any number of horses may be attached to this band, to draw in a straight line the length of the band and turning short round the pulleys.

Attached to the threshers is a speed wheel 18 or 20 inches in diameter, from which a belt is run on the cylinder pulley. A small grooved pulley connects with the speed wheel and receives the band from the main wheel at the top of the shaft.

The cylinder is turned from 1500 to 2000 times in a minute, and with force sufficient to thresh a bushel of wheat in less than three minutes with one horse.

Two cylinders of the threshers used is about 24 inches in diameter, and about two feet long.

This machine costs from \$35 to \$40, and in operation and construction is very simple. There is no doubt but, with good attention, it will with one horse power weighing 1200 pounds, thresh 100 bushels of wheat in 10 hours.

I have attempted to give such a description of the horse power as that you may understand it. I have no doubt it is just the thing for the wheat growers of the west.

There is an account of the use of this machine in Hill's Monthly Visitor for June, 1841, and from my acquaintance with quite a number of the men who there certify, I have the fullest confidence in their statements. Yours respectfully,

S. C. LYFORD.

Meredith, N. H., April, 1842.

Manure for Potatoes.

Woolen rags are an excellent manure for potatoes. The rags are cut up in small pieces and put under the sets at planting; and the effect produced is wonderful. It is a long time since I planted any in this way, nor did I ever at the time make any particular observation as to the quantity produced; but this I can say, that they far exceeded those that were manured in the usual way. It might heighten the effect if the rags were dipped in, or saturated with ammoniacal gas liquor; at least it might be interesting to make the trial.—*Gardener's Chronicle for April 16th.*

CULTURE OF POTATOES.—The cultivation of potatoes being considered of great importance, whether relating to increase of quantity or improvement of quality, I would submit a method of culture, which may be new, and which I have for some years found to succeed with a second early kind. Of the potatoes to be planted I destroy all the eyes except one or two with a hot iron. I set them whole, and at the distance between the rows 2½ feet, and 12 or 14 inches apart. The produce has generally been 60 to 70 well formed potatoes, instead of 30 from those planted in the usual manner. Mine had the same management and quantity of manure generally need. E.

[Gardener's Chronicle for April 16th.]

We have read the above with some little surprise. We cannot say that it may not be true, nor have we any objection to our friends boiling their seed, if they think it would do better.

From the New Genesee Farmer,

On Rearing Calves.

MR. COLMAN—Having seen occasionally a hint in regard to the rearing of calves, and also recently a call for some remarks on the subject, I offer the following suggestions as the most economical and convenient, and consequently the best mode that I have adopted.

As soon as the cow has calved, she is milked clean and suckled to remain with her calf for the space of about 12 hours or to the next milking time, when she is again stripped out clean and shut away from her calf until the next milking time. She is then partially milked, leaving enough for the calf, but not so

much as to satisfy him without his sucking the cow entirely of an, so as to bring down the bag and prevent its eaking. The cow is then let in to her calf, which will greedily take the balance left for him. The cow is again removed as soon as she has supplied the wants of her calf, and so I continue morning and evening, partially to milk the cow before she is permitted to go to her calf, leaving him to do the stripping until he is 3 days old. He is then weaned from the cow entirely and fed with the new milk of the cow by hand, from one of the 'calf's pails,' and so I continue to feed him until he has learned to drink freely, probably at about a week old. I then take away a share of the cream from his milk, and give him a mixture of new and skimmed milk, say two quarts new and one quart skimmed milk, with a spoonful of oil meal or oil-cake ground, sprinkled into his milk, instead of boiled flaxseed. The oil is worth more for painting than for feeding cattle. I therefore let the painter or druggist have the oil and the calf takes the cake. The quantity of new milk is now daily decreased and the quantity of skimmed milk and oil meal is daily increased, until at the expiration of another week, when his allowance becomes 3 to 4 quarts of skimmed milk and a half pint of oil meal, which will make him look as slick as a mole. The milk is warmed a little and the oil meal sprinkled in, and the whole poured into a 'calf's trough' made for the purpose, which is a stick 3 feet long, 12 or 15 inches in diameter, split open, dug out and legs set in of the right length to bring the trough up to his chin, so that he may take his allowance standing in an erect and natural posture. I usually feed two in one trough and see that they are well matched as to performance at least."

My calf's pails are old tin pails whose bottoms have failed, which I supply with a piece of thin soft board cut round, crowded in, and fastened with 5 or 6 small tacks.

If the above suggestions are worthy a place in your valuable paper, you are at liberty to insert them. E.

The subjoined is a very sensible article and worthy of all consideration.—*Ed.*

From the New Genesee Farmer.

On Noxious Weeds.

When rank and a vicious weed usurp the soil,
They cheat the husbandman of half his toil.

During an excursion of some sixty or seventy miles last summer through a part of this county and as far as the eastern extremity of the county of Wayne, I was very much struck with the surprising inroads which foul weeds, of almost every species, are making in this new country of ours. It ought to be a startling fact to the farming community in general, that here in Western New York, where the track of the savage is scarcely obliterated, the Canada thistle, red root, white daisy, John's wort, yellow dock, mullein, and other kinds of noxious plants are, on some farms, almost entirely usurping the place which ought to be occupied by useful productions. Although my own immediate neighborhood is not so much infested, yet I plead guilty to some degree of negligence in this particular; and as my own mind, during this excursion, became thoroughly impressed with the magnitude of the evil, I wish to arouse the attention of others to the ruinous consequences of further neglect.

It is a subject which intimately concerns all land owners. Land infested with these weeds will most rapidly depreciate in value. It is evident that when a meadow or grain field is overrun with any of these plants, it not only requires a great sacrifice of labor to eradicate them, but in most cases, if you go into any thorough and effectual process, you must entirely de-

* The above mode, by continuing the new milk and adding the oil meal, will make a fine piece of veal. I have once adopted it, and it succeeded admirably.

range your farming plans, and probably for a season or so lose the use of the soil.

I have heard it estimated that the clearing of the original forest and preparation of the land for wheat cost only from \$10 to \$12 per acre. At how much less expense can a field be cleared of Canada thistles, red root, or white daisy, when thoroughly besprinkled with them? Carefully estimated, the whole loss and expense, I am bold to say, will not fall far short of that when you see the last feeble stalk expire.

Let these considerations stir us up—and I would especially remind those who, from the newness of their farms or the care of former owners, have escaped this evil, that "an ounce of prevention is worth a pound of cure." If you chance to perceive, in passing to and fro through your field, a single specimen of the above named weeds, don't stop to view it as a curiosity, but attack it as you would a bear; tear it up root and branch—go back to the spot again and see that you have caused complete extermination, so that not a living vestige remains. Let me urge those who, by their own or the negligence of former owners, have pretty thrifty patches of some of these plants, not to delay even if it takes a little time and present labor. Your labor will be exceedingly well spent in seasonally arresting the progress of the evil. As our farms grow older we must expect some drawbacks, and one of these must consist in keeping them clean of foul weeds. The produce of our lands will never come to us in abundance, without pains—we cannot always expect to get along as when

"The earth is young, and yields kindly
—her fruits with little labor."

But I have spun out these remarks beyond what I intended. I will close by observing that it will be of but transient use for a few isolated farmers to attend to this subject. Unless the general attention of land proprietors is awakened, little can be permanently done, where land so frequently changes owners.

There is now an act on our State Book making it lawful for the freeholders of any town in the state, to raise money to defray the expense of destroying the Canada thistle. I wish this enactment might extend to other noxious weeds, and be put into practical operation in the respective towns.

In the counties of Albany, Clinton, and some others, special petition was made to the Legislature, in answer to which a law was passed providing for the destruction of all noxious weeds at the exclusive expense of the owner on whose land they are found. How far this is put in force I will not pretend to say, but if we were all subject to such an enactment, it would undoubtedly be for our ultimate interest.

I. B. SMITH.

Ogden, May 25th, 1842

Fatal Effects of Garget upon a Horse.

MR. EDITOR—I do not think it sufficiently known that Garget is death to a horse. A neighbor of mine was in the habit of giving his horse small ears of corn as he passed his stall. Passing evening before last with some pieces of Garget in his hand, and not having any corn, he offered the horse a piece of the Garget, which it took, and died within twenty-four hours.

Cornish, May 20, 1842.

W. W.

PUNCTUALITY.—If you desire to enjoy life, avoid unpunctual people. They inspire business and poison pleasure. Make it your own rule not only to be punctual, but a little before hand. Such a habit secures a composure which is essential to happiness. For want of it many people live in a constant fever and put all about them in a fever too."

SOVEREIGN REMEDIES.—For the gout, toast and water; hoopoping cough, ipecacuanha; bile, exercise; corns, ear shoes; blue devils, employment; rheumatism, new dannel and patience; toothache, extraction; debt, retrenchment; love, matrimony."



ROCHESTER, JULY, 1842.

Important Notice.

There is a large amount due us from Post Masters and Agents in the Western States and elsewhere, mostly in small sums; it is true, but our whole resources depend on such small sums, and therefore we hope no one will delay sending on that account.

¶ *One word to our friends.*—We have a large supply of back numbers of the current volume on hand, which ought to be in the hands of subscribers. Will you not help us—would you not be doing your neighbors as well as ourselves a real kindness, by soliciting them to subscribe? The currency is now considerably improved, and bills of most of the states will answer for remittances.

PUBLISHERS.

To Correspondents.

The article on E. Foot's valuable and highly improved Tight Air Stove, came too late for notice this month. The article on Onondaga Salt is necessarily postponed until our next number. The communication of M. R. P. on the bee-moth, shall receive due attention. The inquiry of R. respecting the destination of Farmers' Sons, is one of the most important that can be made, and shall have the attention which it deserves. We have to acknowledge a valuable communication from G. S. on the subject of Canada Thistles, which we very unwillingly defer, because received too late. Our respected friend S. W. will we trust, have patience with us for this month. We forwarded at once by his request the papers to New-York.

The NORTHERN LIGHT we receive very rarely; but we know the admirable talent with which it is conducted, and cordially recommend it to our friends as one of the most useful and best monthly journals in this country.

J. V. K. of Little Britain, is advised to cut off the black excrescences or diseased limbs of his plum trees as fast as they appear and immediately burn them. If the condition of the tree is such that he cannot hope for a cure, he cannot remove and burn the diseased parts too soon. His communication on Mildew on Gooseberries we shall avail ourselves of hereafter.

An article on the culture of asparagus in reply to a correspondent, is necessarily postponed.

We thank our friend T. T. from Le Roy, for his valuable communication.

We appreciate the good will of an "Old Dutchman," but should prefer to receive him in his native costume. As it is, he is "out-herods Herod."

Our friend the Vicar of B. V., remembers us kindly. God bless him! We shall not overlook his reasonable inquiries. Heaven send him a Cardinal's robe and cap, if he desires them, or any thing else good which he can ask for short of a heavenly crown. May that coronation be long postponed. Is he the only friend we have left there?

To other friends and correspondents we send all kindly salutations. Though not named they are not forgotten; and though some of their favors seem long deferred, they are none of them overlooked or neglected. If our omnibus continues full, we must presently set up an extra.

We have to acknowledge this 25th June, a small basket of the Methven Strawberry from Mr. N. Dreper of this city. They are extraordinary. We have heard often of two bites to a cherry—here are three to a strawberry.

We thank some friend for copies of a Letter to Lord Ashburton on the Corn and Flour Trade with England. Its views are highly important and must command attention.

We had been promised for this number by competent hands, a notice of Dr. Dana's valuable book, the Muck Manual, and of Alonzo Gray's book on Scientific and Practical Agriculture, but are very sorry to be disappointed. We hope for them for our next number, but alas! for promises for the enforcement of which there is no legal remedy.

We commend to persons interested, the advertisement of John L. Whiting, Land Agent of Michigan. We have no doubt that business committed to his charge will be conducted with the strictest fidelity.

Patronage and Postage.

A subscriber, who informs us that he joined with a neighbor in taking our "valuable paper," price 50 cents per year, informs us likewise, that he is so well satisfied with the publication that he has concluded to take it separately; and, instead of sending by the post-master, takes us 12½ cents for the information. We are certainly obliged by his good will; but it is obvious how soon we should be enriched by such patronage.

Postmasters are authorized to transmit the payment of subscriptions to periodicals, free of charge to the publishers, and are generally kind enough to do it. Here we trust, we shall be excused for expressing our regret for the discouragement thrown by the Post Master General in the way of post masters acting as agents. We deem it extremely impolitic and hardly just. Take our own case. Publishing at as low a price as we do, we cannot afford to employ or send out special agents. Post masters have heretofore always been allowed to act as agents for us, and we cannot conceive in what way it can interfere with their duties. Now our humble sheet, with the postages incidental to it, contributes annually to the Post Office revenue a sum hardly less than three thousand dollars per year. Is it not, therefore, right and just, for the interest of the Department itself, that we should be indulged in this matter. We hope that the other publishers of periodicals in the country, will see how much it concerns them to make suitable representations to the government on this subject.

Notice of Convention of Ploughmakers.

We regret to learn that the notice in our last of a Convention of Ploughmakers to be held at Canandaigua, was regarded as designed or adapted to prejudice a case to be brought to trial before the Circuit Court of the United States, at its June term in Ontario county. No such design was entertained; nor, do we think, that the terms of the article warrant the inference. The notice was inserted at the request of the ploughmakers, who called the meeting and handed by them to the printer. We understand it as expressing their view of the case, and their statement of what they confidently expected to prove. What could be proved, or what were the actual facts in the case, might be an entirely different matter; and of the evidence in the case we know nothing. Had a communication of the facts expected to be established on the other side been presented, we should as cheerfully have published it. In this case we had not even an opinion; and did actually reject a communication in reference to this matter where the facts expected to be proved were absolutely and without qualification asserted. One of the last things we should be willing to do, would be to interfere in any way whatever, to disturb the impartial administration of justice between man and man. Allow us, as it seems to be necessary, to add to what we have before said, that we hold ourselves in no respect responsible for the opinions and notions either of our correspondents or advertisers,

unless we directly and explicitly endorse them. As his subject is a matter in which the farmers are much interested, we shall report the decision of the Court soon as received. Our only desire is that the right may prevail; and this is always ultimately for the good of all.

Since the above was in type, we are informed that the decision of the Court has been given against the claims of the heirs of Jehro Wood. Of the particulars of the decision we are not apprised.

June 27th.

New Agricultural Store.—Farming Implementments.

We are much gratified to learn that B. F. Smith & Co. have opened a store in Syracuse, N. Y., for the supply of the best agricultural implements of every variety, which the New England or New York manufacturers can furnish. If this establishment is well conducted, there can be no doubt that it will afford eminent advantages to the farmers of Western New York, of which we hope they will fully avail themselves.

We cannot advise farmers to be in a hurry to get every new tool or implement, which presents itself and promises to effect a great saving of labor; for in many cases the promise is delusive; and the saving proves only an increase of labor, and no little expense. We advise them not to purchase too many tools, for the use of them will be troublesome, and the more they are multiplied the less care is likely to be taken of them. We advise farmers not to purchase any implements or machines, which promise to do half a dozen things by the same operation, for in this case they are generally complicated and liable to get out of order, and if out of order, not easily mended or repaired. Besides they seldom do many things well. We advise farmers likewise to remember that the best of all machines is the human hand, when guided by a sound judgment and a clear eye. But then we advise them to obtain all such implements as are necessary for the proper management of their business, and never to live by borrowing, which is generally the means of all ways of getting along, and makes a man a perfect nuisance to his neighborhood. We advise them to get the best tools and to keep them in the best order. We remind them that there may be a great saving in the kind of ploughs which they use, some doing the work far better than others, being handled with much more ease; and requiring perhaps not half the power of draft which some others require. We remind them that a good sowing machine may enable them to sow their grain much more evenly than they could otherwise do it, and with a great saving of seed. We remind them that a cutting machine of the best kind will enable them to save certainly a third of their hay; and their cattle, if well fed in this way, will be in better health and condition than when fed wholly upon long feed. We advise them by all means to have a good roller, a very rare and yet one of the most useful implements on a farm, for sinking the seed, for forcing the stones into the ground where there are stones, so that they may be out of the way of the scythe, for crushing the clods so that the tillage may be made finer and for leaving the land in a clean and handsome condition. We advise, likewise, to a farmer's having a revolving horse-rake wherever his land admits of its use, as saving, when well managed, at least two thirds of the labor. So we might go on with further counsel, but this will do for a beginning. Whatever a farmer gets, let it be of the best quality. We do not mean that his plough should have either gilt or mahogany handles; but we would have it made of the best materials, in the nearest, strongest, and most substantial manner; and if it should be painted and kept well painted, and slightly

OATS.

Will the Editor please state in the next number of the Farmer, the usual quantity of oats sown on an acre by the common farmers in England and Ireland, and also the most suitable quantity for New England on ordinary or highly cultivated land. Any remarks upon the subject which the Editor may have time to make, would be read with interest by a subscriber.

R.

The usual quantity of oats sown on an acre in this country is three bushels. The quantity sown in England is from four to six bushels per acre. The English farmers are in the habit of sowing more seed to an acre than is done with us. Of the potatoe oat, one of their heaviest oats, less seed is used than of others, because it has no awns, and a half bushel measure contains more oats in number than of other kinds. The cultivation of land in England is very much more careful and thorough than with us; this may be a reason for sowing more seed. The quantity of seed to be sown upon an acre of any grain deserves consideration, and especially experiment. One of the best farmers in Massachusetts is accustomed to sow three bushels of rye, and says he finds an advantage in doing it, whereas few farmers sow more than one bushel to the acre. Of spring wheat our farmers sow usually two bushels; of winter wheat one and a half. In sowing wheat in autumn, a difference in the quantity of seed is made by judicious farmers, as that which is sown early has more opportunity to spread, or as it is termed, to tiller well, and consequently less seed is required. Where the land is rich and the cultivation good, we are strongly of an opinion that too little seed is generally sown. Where the grain is thin, the crop is more apt to suffer from drought. Oats require a moist and rather cold climate. We have known more than one hundred bushels upon an acre; and an average crop of 93 bushels to the acre, from a field of eight acres. The general average through the country is not over forty bushels. No attention is paid to the selection of seed with us; but abroad the largest oats are sometimes picked out for sowing. We have no doubt that more care in this respect would be amply compensated. A careful selection of the earliest, fullest, heaviest and brightest plants in the field would presently give a farmer a crop much above ordinary. Of the two kinds cultivated among us, the common branching oat and the Tartarian or horse-mane oat, where the panicles hang all on one side, the latter is thought to yield the heaviest crop. An eminent farmer in New Hampshire, in whose judgment we have great reliance, prefers this kind, and his crops for years have averaged about sixty bushels per acre. Some persons allow the kinds to become mixed, but they do not ripen at the same time; and the common oat gets into a condition to waste or shell out before the Tartarian becomes ready for harvest. Oats should be cut early; they are less liable to waste, and the straw is deemed better for the stock.

On Making Butter.

MR. COLMAN—I am no farmer, but have, on looking over your paper, noticed a communication from Mr. Bennett in the April number, upon the subject of making butter in winter, together with your remarks, and was much pleased with the importance which he and you attached to it. Butter is truly an important article, and there is nothing that comes upon the table about which people are more squeamish; hence the best methods of making it at all seasons of the year are worthy of consideration. It is generally conceded that there is very little difficulty in making butter during the season of grass—the quality depending upon the skill and neatness of the maker; but how to make good sweet butter in winter, that is the question. Much de-

pen is upon the cow, the manner of keeping and feeding, but much more upon the management of the milk. The experiments of Mr. Bennett are valuable, but I am quite certain from my own experience, or rather from the experience of my wife, which is the same thing, that equally good results may be attained at a much cheaper rate; by dispensing with the expense and inconvenience of double pans, and the trouble of scaling the milk, and substituting a more simple process. After trying various experiments, she has settled down upon the following simple plan.

In the first place, the greatest care is taken to have the milk things clean and sweet; the milk is strained into common tin pans immediately after coming from the cow, and set in a room warmed by a stove. It stands usually 30 hours, when it is skimmed, and the cream, with considerable of the milk, put into a stone crock in the same room. In 3 or 4 days enough is gathered for a churning; if it is not sour, the crock is set into a tub of warm water until it is sour. It is then put into the churn and converted into butter, usually in from 15 to 25 minutes. Following this method, our table has been supplied during all the past winter with butter so fine that it has been much admired, and pronounced equal to June butter, excepting only the color, which is not so deep a yellow; we have never used carrots either for coloring or feeding. There is no danger of a failure in churning; never, since this course has been pursued, has there been a single churning put by because it would not come. There has been no witch in the churn, and consequently no need of putting in the heated horse shoe to drive her away, as I have known done at. I have never ascertained the exact quantity of butter made from a given quantity of milk, but having but one cow, have been very particular in weighing from week to week for three months. From the middle of November, (a few days before which time the cow calved,) we found an average of ten pounds per week. The cow is a half Durham, 10 years old, from a bull which was brought into this village some 12 years ago from the vicinity of Boston, said to belong to the family of the stock presented to Massachusetts by Admiral Coffin. She has been fed during the winter with a mess of wet shorts night and morning, with occasionally some potatoes; frequent salting; good hay, and a warm stable.

We find a decided advantage in skimming, to take up considerable of the milk with the cream, and let it go into the crock, and by frequently stirring it together I think, Mr. Editor, that I can furnish a satisfactory answer to the question put to you by your fair friend, in relation to the trouble which so often happens in churning. We have always had difficulty when the cream was sweet; but since adopting the above plan, no such thing has occurred.

Respectfully yours,

SAML. H. ANDREWS,

Canandaigua, 1842.

Summer Beer.

To make the best flavored, cheapest, and most innocent beverage used, (save water,) have a strong cask painted, to make it impervious to air—commence by putting in (say for 10 gallons water,) 1 quart yeast, 5 pints molasses, a few drops oil of spruce—a quart for the aforementioned, should be of the capacity of fifteen gallons, to be without a bung, and to stand on one head; in the other a hole to put in the ingredients—to be tapped about two inches from the lower head; when all is in, stop it tight, by the cask down and violently agitate the mixture for a minute, then open the cock and a quantity of air will rush in, when it stops, shut the cock, and rock another short spell, open and air will again go in, but not so much; so operate as long as air will enter, then stand it up, and in the course of a few hours it will be fit for use. To accelerate action, a will be well the first time to put in a pail of hot wa-

ter. It will keep good but a short time, and will soon be tart; then draw it off, if any is remaining, down to the cock, and put it into a vessel, and in time it will become vinegar. To make again, you have only to put in the water necessary, half a pint of molasses per gallon, and a few drops oil of spruce, and shake as before. Air must not be allowed to escape, for if it should the beer will be good for nothing.

Cornish, May, 1842.

W. W.

We give the above recipe, which has been kindly sent to us, with our plain advice to let it alone. There are few things worse for laboring men than small beer; for we have never known a case, where it was furnished liberally, that men did not, as Cobbett says in his emphatic way, "make swill tuls of their bellies." It is very much so with molasses and water, modified as it often is by a profusion of ginger. Men, when they get their mouths to the mug, never know when to take them away, and it goes down their throats like water in a shower down the spout. Coffee, chocolate, milk and water, or nature's pure moonshine from the crystal spring, is never swallowed with the same insatiate greediness. We believe, likewise, that few things sooner disorder the stomach and impair its tone than this habit of excessive drinking of small beer, molasses and water, &c., especially in hot weather. We know that success in attempting to persuade men to govern their appetites, is well nigh hopeless; but long observation and experience under hard labor has satisfied us, that if possible, it is best never to drink anything excepting at the regular meal times; but that especially it is best never to drink any thing in the forenoon; that water, pure water, is the most safe, nutritious, and invigorating of all liquids which can be taken into the stomach, and when drank in moderation may be used with perfect confidence; and that more than three meals a day is hurtful instead of beneficial. If one is dry, a little piece of cracker chewed will produce a secretion of the saliva and the thirst will be quenched; or if any thing more is needed, let it be a draft of clear water. We advise for laboring people, and we do not speak without some experience on the subject, breakfast from six to seven, dinner at twelve, and tea between five and six. If something more is needed, let it be a bowl of milk in the evening when all work is done. But all ten o'clock's and four o'clock's are pernicious.

We have known an excellent drink prepared on a farm where a hundred acres were annually under the scythe, and other things in proportion. It was thus; from a pint to a quart of fine oat-meal was put in a two gallon jug, filled with water, and well shaken and kept in a cool place. It would very soon be fit for use, and very soon become agreeable, and always prove a good quencher of thirst as well as assafe and nutritious. It is quite unnecessary to say before trying it, that we should not like it. All of us are the creatures of habit and we have few tastes, even among the strongest, which are not acquired, and oftentimes in spite of original aversions and disgusts.

On Retting Hemp.

MY DEAR SIR—In addition to my communication to you on the cultivation of hemp, I feel that I may render a service to the inexperienced cultivator in being more particular as to the proper season for retting. The importance of this has been mentioned to me by a gentleman in the business, on seeing my letter published in the April number of the New Genesee Farmer. This suggestion, with a wish certainly not to mislead the agricultural public, and to answer some inquiries made of me from abroad, has induced me to speak more particularly on the process of retting.

It is important that the retting should be finished in cold weather; if the hemp freezes as soon as drawn from the pond, so much the better. I have seen hemp ponds frozen several inches thick; this is broken up by drawing off the water.

The first of December, in our climate, may be considered a proper time for taking hemp from the water, and the average time required for rotting is about six weeks. A sled drawn with a chain by one yoke of oxen is a convenient way of removing hemp from the pond to the upland to dry. It should be carefully laid on the ground in bundles to drain, and become stiff enough to set up in open bunches against the fence to dry, where it may stand without injury all winter. You will understand that the pond must be an artificial one, that it may be drawn off at pleasure.

Perhaps you may be able to condense something from this that may be useful to some of your subscribers. Yours as ever, J. WILSON.
Dorfield, Mass., 1812.

Comparison of English and American Farmers.

We publish the subjoined letter with much pleasure, and have only to regret that, owing to our absence, it did not appear in its proper place. Its references, however, are perfectly plain and intelligible. We can hardly persuade ourselves that Wm. Howitt's account of an English farm dinner can be intended to give a picture of every day's life. If so, anchorite as we are, we must go for American sobriety, or what perhaps our friend would call abstinence, not to use any harder term. In one particular, however, there must be a great difference. The farmers whom Howitt describes, are what we should call the middling classes, the tenants of the farms or the managers. We have no such class. Our farmers, properly so called, are all laboring men; and we apprehend upon a comparison of the tables of the laboring men in England and Scotland with the tables of our farmers, the comparison would be strongly in favor of the latter. The farmers, whom Howitt describes, would here belong to what we should call gentlemen farmers, men who would as soon think of jumping overboard as jumping into a farmer's flock, and whose whole business is to command and direct the labors of others. In England this class of men, who are after all mere tenants or overseers, keep their hounds, their race horses and hunting horses, and indulge in the luxuries, if so they may be called, incident to such establishments, as much, though not as expensively, as the highest gentry in the kingdom. We have no such class among ourselves; and whether the general morals and general comfort would be increased by their introduction, it will be time enough to say, when it is likely to take place. At present we think there is little probability of it.

DEAR SIR—I consider the letter of S. W. in your March number, so replete with errors, that I cannot let it pass unnoticed. I should have answered it in your last number, but I expected that Mr. Garbutt, to whose letter it was a reply, would have noticed it; for surely he cannot find any difficulty in sustaining the position which he advanced, on the superiority of the English climate for the general purposes of agriculture. Now in the first place, I cannot agree with S. W. that if Indian corn could be raised in England, it would better the condition of her "starving population." For I have observed in this country that when the season has been favorable for corn, most other kinds of grain and root crops, and also pastures and meadows, have suffered. Granting corn to be a valuable crop, still it is not so valuable a crop that the farmer would wish to sacrifice all others for the sake of raising it. It is a well known fact, that the average of all kinds of grain grown in England is higher than here, and the quality of some, as oats and barley, is very superior: this I think may be fairly attributed to the climate, unless S. W. chooses to ascribe it to the superior industry of the English farmer over the "ease-loving farmers" of this country. Then there is the horse bean, which cannot be grown here, which I consider equal to corn for all feeding purposes; it is grown to a great extent in Eng-

land is cultivated and harvested at less expense than corn, and is an excellent preparatory crop for wheat. Then look at the great extent of the root crops, and the immense advantage of the English climate in not making it necessary to protect the turnips through winter. How is it possible, with our winters, to grow root crops extensively, when all have to be put safely away in cellars or pits?

One word to our friend M. B. B., who has given us an account of Mr. Sheffer's root crops to show that roots can be grown extensively in this country. Now I understood Mr. Garbutt in using the word "extensively," as applying it to the growth of roots in England. Mr. Sheffer has certainly done well, and deserves great credit, but should an English farmer, or any friend for him, boast of raising 6500 bushels of roots, he would assuredly get laughed at. But above all, look at the verdure of an English pasture, which gives a richness to the face of the country, the absence of which here gives to an Englishman, on first travelling through this country, an idea of barrenness and sterility. Wm. Howitt, in his work entitled "Rural Life of England" says "one of the great charms of the country, dependent on its climate, is that rich and almost perpetual greenness, of which strangers always speak with admiration."

S. W. asks what would become of our "ease-loving farmers if they had to encounter the cold, sour, wet climate, &c., of England? would they not be reduced from bacon and corn bread, to turnips and pea soup—from the delicious wheaten loaf and hot rolls, to oat cakes and potato broth?" I cannot possibly tell what would become of our farmers, but I can tell how the English farmers fare under what S. W. considers such adverse circumstances. And I cannot do better than quote again from Wm. Howitt. After describing a substantial luncheon, he comes to the dinner. "The hour arrives; well here they all are; and here are the ladies all in full dress. Hands that have been handling prime stock, or rooting in the earth, or thrust into hayricks and corn heaps, are washed, and down they sit to such a dinner as might satisfy a crew of shipwrecked men. There are seldom any of your *richesy wretched soups*, except it be very cold weather, and seldom more than two courses; but then they are courses! all of the meat kind seemingly on the table at once. Off go the covers, and what a perplexing, but unconsumable variety. Such pieces of roast beef, veal and lamb; such hams, and turkeys and geese; such game, and pies of pigeons or other things equally good, with vegetables of all kinds in season, peas, potatoes, cauliflowers, kidney beans, lettuce and whatever the season can produce. The most potent of ale and porter, the most crystalline and cool water, are freely supplied, and wine for those that will; when those things have had ample respect paid to them, they vanish, and the table is covered with plum puddings and fruit tarts, cheese-cakes, syllabubs, and all the knickknackery of whipt creams and jellies that female invention can produce, and then a dessert of equal profusion."

But really, Mr. Editor, I will not tantalize you and myself by enumerating all the good things, but if you have not read the work from which I have quoted so largely, do read it. The author then goes through tea, and finishes up with a substantial supper of hot game, fowls, &c. He then concludes the chapter by remarking, "such is a specimen of the festivities of what may be called the middle and substantial class of farmers; and the same thing holds, in degree, to the very lowest grade of them."

If this be a true picture, which I know it to be, you must agree with me that S. W. has paid a very poor compliment to the industry and intelligence of our American farmers, to suppose that with a climate similar to England, they would be reduced to live on turnips and pea soup, oat cakes and potato broth. B. M.

Book-Farming.

MR. EDITOR—I have been an attentive reader of several agricultural papers for four or five years past, and trust I have been well paid in the knowledge gained; at any rate I have received from them much gratification. I think one great benefit to be derived from their perusal, is the exciting a spirit of enquiry.

I have been termed among my neighbors an experimental "Book Farmer." I have failed in many things, and succeeded in others, but in the most important of all, that is in making money, I have met with a total failure. I propose, therefore, to give to my brother farmers my practice and experience in full, and my opinions rather generally, on a variety of subjects, although somewhat disconnected, and yet such as I believe have an important bearing on the true interest of the farmer. If you deem them worthy of insertion in your valuable paper, I shall feel much gratified in having furnished them. My motto is, that every disease has a remedy; but we must first point out the disease, before we shall be likely to discover the remedy.

Would not agricultural papers benefit the farmers still more, if they would examine more fully the Statistics of the Country; and instead of urging us on to over-production in some things, tell us how we may raise enough (and no more than enough) to supply the market, and at the same time get the greatest returns for our labor. In my opinion, much more money would have been made by the farmers, if they had been timely informed of the amount of Pork in market kept over from last year, and how much would be required this year to supply the demand, being myself convinced that if there had not been more than one half of the surplus produced this year, that the farmers would now have had more corn in the crib, and the one half would have put more money in their pockets, than the whole amount of the proceeds of their pork has done. Such are my views of the effect that supply and demand has in establishing prices. On this branch of the subject and some others which I wish to discuss hereafter, there is a broad field left wholly uncultivated, that needs deep ploughing with a "strong team." I shall attempt only to clear off some of the underbrush, and leave the use of the subseil plough to some one who drives a "stronger team," as I am admonished that my stumbling ponies will not be able to do the work effectually.

The manufacturing, commercial and mercantile interests, have for a long time supported papers devoted exclusively to their interests. They have read and collected the statistics of the country and they better understand the law of supply and demand, and ability to pay, than the farmers. What would the manufacturers think, if the papers devoted to their interests were to stimulate them to produce or manufacture twice as much as was required for consumption, when the same article could not be exported except at a loss of 50 or 100 per cent, on the first cost?

I wish to cast no censure—my only object is to awaken a spirit of inquiry. The farmers in this country never have been awake to their interests. They have been content to let others do their thinking for them, and as long as they continue on in that course, they may expect the certain consequence—that,

"In every hand, and on every soil,
Those who think, will govern those who toil."

And if we surrender those inestimable privileges to others, on the account of our stupidity, how can we expect that our interests will be properly attended to?

We ought to pursue, in my judgment, a more definite system in all our operations. We ought to know the precise and relative cost of all our productions—in every state, on every degree of latitude and longitude, and according to the several specified modes of cultivation as practised by a majority of the American farmers. With such data before us, we should be able to under-

etand adapt our production to the soil and climate, and turn our attention to the cultivation of that which was most profitable, and consequently keep up a more steady equilibrium of prices. As it is, I am satisfied that some few of our products yield us a fair compensation for our labor; and that there are others which might do so, which we do not now cultivate; but there are many more that do not yield us one half of the expense of cultivation at present prices, counting labor worth but fifty cents per diem. It is a mistake to suppose that one mode of cultivation or kind of production, will answer equally well for every section of our diversified soil and climate. What is profitable in one section is unprofitable in another.

I fully agree in every particular with your valuable correspondent, W. Garbutt, in what he has said, in his comparison of English and American agriculture; and I would apply the same reasoning to the different sections of our own country. It may be profitable or good economy to cultivate roots on a large scale for feeding stock in the vicinity of our cities and large towns, where laborers are more plenty, land dear, and hay worth from ten to twenty dollars per ton; but from my own practice and experience, I am convinced that it has cost me on my farm from fifty to one hundred per cent more to winter a creature on roots, than it has on hay.

Permit me here to remark, (with a desire, not to appear censorious, as it certainly is contrary to my feelings,) that the agricultural papers, in recommending a system of cultivation, have not duly considered the natural differences of soil, climate, prices of labor, products, lands, &c.; but have too generally recommended the same system for every section of country. Or perhaps, they have supposed that the farmers themselves would take those things into consideration; but the farmers omitted to use their natural faculties, and consequently have failed in their first experiments, which is the cause of some of our best farmers entertaining strong prejudices against what they sneeringly term "Book Farmers."

I was much pleased with the manner which you treated the subject of a threatened withdrawal of patronage, because you admitted an article in your paper that did not correspond with the views of some of your subscribers, on the subject of Protective Duties. You say, and say truly, that it is a matter of great national importance, and a question that concerns the farmers as much or more than any other class; and further, that you are willing to hear, and let your readers hear what may be said on both sides of that great question. I have read several times, and with great satisfaction, the article in your January number complained of. I consider it a spirited, well written article, and an honor to the head and heart of the writer—a containing the sentiment of a true American, and I perfectly free from the "advocacy of British interests." I ask your respected friends, if they have not seen much stronger articles in the Farmer in favor of protective duties than on the opposite side of the question, or the one signed S. W., the article objected to. Suppose that S. W. or myself should threaten to withdraw our patronage on that account, what would you think of us? would you not say that our cause was a bad one, if it would not bear discussion and investigation, or

"He that will not reason is a bigot,
He that dare not is a slave."

But, Mr. Editor, you need not fear that S. W. will withdraw his patronage of 50 cents or 50 dollars, because a portion of your correspondents differ with him on that subject. I will vouch for him, although an entire stranger to me; yet I am certain he does not fear free discussion.

Should you consider my desultory remarks worthy of a place in the Farmer, I propose giving at some future time, an estimate in detail of the first cost of pro-

ducing the several agricultural products of Michigan, found on an assumed basis, of improved land at \$20 per acre, labor at 50 cents per day (by the year), and 6 percent interest on the capital invested, which is not very far from the real standard. And trust that some one, if not all, of your correspondents, in the different sections of this glorious country, will concur with my views on this subject, and make it manifest by sending in their estimates in detail, with all the circumstances, whys and wherefores, for publication.

J. S. DUTTON.

Monroe, Michigan, 1842.

Reply to Zelia.—Defence of Farmer's Wives and Daughters.

MR. EDITOR—I would not intrude upon your patience so soon again, if I did not feel a little excited about some of Zelia's remarks, which, though good and full of interest, I consider as not applicable to farmers, their wives and their daughters generally. I commend the discretion and wisdom she is anxious to enforce, but would guard against views which I conceive to be erroneous.

In the first place, she calls upon women to consider whether their influence goes to promote temperance, industry and their natural results, or the opposite. These considerations deserve the attention of every mother and daughter, every father and son. The mind and the body are so connected, that the occupation and condition of the one sensibly affects the other. When we labor with our hands, our minds almost unconsciously imbibe sentiments and feeling which the employment is adapted to inspire. When we open our hearts to the influence of piety and compassion, our hands are prompted to acts which may alleviate the sorrow and distress our eyes behold. For this reason, it is judicious and highly desirable for all persons to employ their minds and thoughts in a manner that may actuate their hands to perform their duty; and study to use physical strength in a manner that may impart to the mind the satisfaction resulting from a useful and virtuous life.

She further adds, "that she believes it is generally admitted, that the extravagance that characterizes our age, the enormous expenditure of time and money on mere trinkets, is the predominant cause of the embarrassments of our times. I suppose that politicians would differ on this point. Be that as it may, I really do not believe that the trinkets of the farmers, their wives or daughters, would amount to a vast sum. They generally understand too well that their money is hardy earned, and therefore prize it too highly to trifle it away. I should have supposed that Zelia intended her remarks for a certain class, to which it would be very applicable, if she had not said "no particular class is exempt from the charge." Now I contend that farmers, as a general thing, are exempt from extravagance in any thing, except the idea that they are too poor to lay out a great many dollars in enlarging, cultivating and ornamenting the minds or persons of their children, or of affording themselves the means of useful instruction. Not that I would advise or wish any one to live beyond their means; not so, but every one should study to make themselves useful, and use the means which God has given them to elevate and improve, to refine and polish, the mental powers and personal qualities, for which the means of improvement have been so amply provided. I should be sorry to indulge any unjust prejudice, but the farmers are more exempt from this reproach of extravagance than the working classes of the cities and villages, as they live more secluded from the fashionable and vain, and consequently have less to tempt their love of show and splendor.

Again she says, "all have lived beyond their means, beyond the limits of common sense and pru-

dence," &c. I must think if Zelia were as well acquainted with the habits and management of farmers as I am, she would not have said all. That they have been to a degree involved in the general ruin and distress that pervades the country, I do not deny. But that it has been brought upon them through the mismanagement and extravagance of their wives and daughters, or even their own, I cannot admit. That the merchants and mechanics, the professional men, and the drones, have long indulged in a vain and deceitful ostentation and extravagance, is evident. But the farmers, although their produce has been much of the time almost unmarketable, and when sold, sold at reduced prices, and on credit, still by the persevering industry of themselves, their wives and their daughters, and the economical management of their business affairs, they have braved the storm of broken banks and broken credit, broken fortunes and broken spirits; and by a uniform course of good policy and praiseworthy self-denial of the dainties and luxuries of life, they have saved their own and many other fortunes. How seldom do we hear of a farmers breaking or losing his farm, except through the generous endeavor to save an unfortunate friend or falling neighbor, or by some rash trade or speculation, wholly foreign from his proper pursuit as a farmer.

Again she says, "no person or people who consume more than they produce, can long escape being enslaved some way or other." As Zelia has made no exceptions before, I conclude she did not intend any here. There may be some it is true, among the farmers, that are possessed of a false and vain ambition; but I fancy they are few, compared with those who deem time and money expended in the cultivation of the mind and person, as almost wasted and improperly applied. It must be evident, that this paragraph cannot touch the farmers, who support the whole combined mass of all classes; the high and the low, the great and the small. If instead of confounding the industrious and frugal wives and daughters of the land with the city automaton and village dolls, who view labor as degrading, and those who labor as slaves, if Zelia had made a wise distinction, and directed her remarks to those whose views are bound up in purposes of ambition, or their lives consumed in a round of idle indulgences of fashionable dissipation, and who subsist only on the plunder of the fruits of the industry of other men, instead of implenting the industrious and independent yeomanry, then I would heartily have concurred in her views. But Zelia, this will never answer—we have come within an inch of politics—and shall be very likely to get a lecture, or an excommunication, either of which would be—dreadful.

But to atone, Zelia, for the liberties I have taken, let me say, had you and I lived in ancient times, and I had happened to have been a priestess at the temple of Delphos, I would have consecrated in golden letters (with the precepts there) your remarks. "I am not desirous of curtailing the pleasures of life, or hoarding up riches for their own sake; but would recommend such economy as will promote permanent and rational happiness; and enable us to do good where the opportunity presents itself. For any other purpose the acquisition of wealth is scarcely worth a thought."

Let this ever be our motto; to combine in a consistent and reasonable manner, the useful with the refined and the ornamental. FLORA.

Ploughing in Vegetable Crops to Enrich the Land.

We publish to day a communication of "Turnipseed" (pray take some other name) on the subject of "Growing Wheat on Inverted Greenwards;" to this we are glad to add a communication of Mr. Tufts of Le Roy, on the subject of destroying Canada Thie-

ties, and his brother's experiment of raising wheat on the same ground. To this we shall hereafter add the experiment of Mr. Kelly in Haverhill, Mass., on raising a crop of rye after ploughing in a crop of charcoal. This account was given to the public in the Transactions of the Essex Agricultural Society, and afterwards in Colman's First Report of the Agriculture of Massachusetts. It will be found of the highest importance. The whole of these communications bear upon the same point, the great value of vegetable matter turned under for the nurture of the ensuing crop.

We shall take occasion here to relate a case of our own, from which we ourselves, had no other person, derived some instruction. We had in our employ at the time two Englishmen, bred framers from their childhood, and skilled and competent in every branch of husbandry. We gave them an acre of land, a clover ley, and desired them to prepare for and cultivate it in turnips after their own fashion, engaging on our part to offer in no way either advice, interruption, or interference. A crop of clover had been taken off early, and they then proceeded to plough and harrow the land thoroughly, and then to pick out every root and every particle of grass left, putting it into small piles, and burning it on the ground, giving the land as they termed it a thorough *cleaning*. The land was highly manured afterwards, and the crop of turnips was good and cultivated in drills in a very fine style; but we had no doubt at the time and have so little now, that it was a great error to rob the ground of all this vegetable refuse; that the crop was less than it would have been but for this abstraction; and the fertility of the land reduced for a length of time. The land was afterwards laid down to grass, and we were satisfied suffered much from this *thorough cleaning*.

On Growing Wheat on Inverted Sward.

MR. COLMAN—Allow me to call your attention to an article in the January number of your paper for this year, on page six, entitled "Three Experiments in Wheat Growing," and signed by "Agricola," dated Greece, Monroe county, N. Y.

I am myself, like Agricola's, a young farmer, and have likewise been a merchant, and have also a friend to advise me respecting my farming operations, to whom I showed the above article in your paper this morning, at the same time asking his advice about practicing upon the above experiments of Agricola.

He objected entirely to the manner and method of the second experiment, but finally said that it might possibly do to treat a clover lot after that manner, that is, (i. e. the clover) would be killed, and what wheat there was would be clean, but did not believe it would produce a good crop—that the seed could not be well covered and would be liable to freeze out—that the ground would be hard beneath the surface, and the grain would not be well rooted. He did not believe the third method would answer at all, as the natural grasses would never be killed, and would grow up in the spring and destroy what wheat did grow, which he believed would be but little.

He said that there were a great many things written for agricultural papers which would not bear examination, and be believed that this was one of them. That many theories were advanced rashly without being sufficiently experimented upon, and that he did not believe that either the second or third method was as good as the first, viz: old fashioned summer fallowing.

On page eight of same paper, in an editorial to readers and correspondents, "Agricola" is welcomed to your columns and a desire expressed to hear often from him.

I presume that desire would not have been expressed, if the editor did not think well of his communi-

cation and believed what "Agricola" said was substantially true, and that the experiments had been actually made.

The object of this communication is to ask if Mr. Colman has any personal knowledge of his correspondent, or whether if in Mr. Colman's knowledge the practice of summer fallowing has given way to "Agricola's" system, in any of the numerous farming districts which he has visited, and with what success. Perhaps this communication, if published, may draw out "Agricola" once more, but I hope not angrily at the doubt thrown out about the results of his practice and experiments.

Respectfully your ob'tserv'r,

TURNIPISEED.
New Windsor, Orange Co., N. Y.

Editorial remarks on the above.

In reply to the inquiries of "Turnipseed" we have only to say that the authority of Agricola for the three experiments in wheat growing, deserves his entire confidence. We have known the system practiced upon by two of the best farmers in the whole country, Earl Stimpson of Galway, Saratoga county, N. Y., and Eliza Phinney of Lexington, Mass. We have known, likewise, other cases, where the same husbandry has been pursued. Success, however, must essentially depend upon the manner in which the ploughing is executed; the sward should be so neatly and completely inverted that all the growing vegetable matter may be covered. The decay of this vegetable matter will furnish nutriment for the growing plant.

Another point, which is not generally understood, but is so well settled by the experience of judicious farmers, given without concert with each other, and without knowledge of the opinions of each other, that it may be considered as ascertained, is that it is much better to plough in this vegetable matter after it has become perfectly ripe, decayed or dead, than in a green or succulent state. For spring grain there would of course be no difficulty in doing this: to wait for this in autumn might carry the sowing on too late in the season. We shall not enter into the philosophy of this, though good reasons may be given; the fact is all about which in the present case we are concerned; and that we deem established.

As to the objections of the sceptical friend of Turnipseed they do not surprise us. We admit that a great many things are written for and suggested in agricultural papers, which are not well established and which must rest upon the responsibility of those who offer them. Where they are clearly erroneous and would be likely to lead our friends into mistakes, we certainly should accompany them with a caution. Where we know them to be well founded and important, we should, if we deemed it necessary, endorse them. Where they are doubtful or altogether speculative, they must pass with our readers for just what they deem them worth: but they are surely not to be considered as our views because we insert them, nor in any case, unless we openly and directly approve them. An agricultural journal must be open to free discussion on all subjects connected with husbandry; and though we have a tolerable measure of confidence in our own judgment, we claim no infallibility, and will not reject statements or opinions of respectable correspondents because they may not quadrate with our own.

As to the other objections of his sceptical friend, which spring out of his superabundant self-confidence, we hardly think they deserve a grave answer. There are a good many men in the world, who have never yet found out that the earth turns round and it is quite probable they never will. Let such men calculate their own almanacs, and let us be thankful that the

cause of an improved or an improving agriculture, or any other cause of public or private improvement, is not left in their hands. Put such men into a canal boat under full way, and you could not make them acknowledge that the boat moved; no, it is only the land running away from them, they *know* it because they see it.

Army Worm and Cut Worm.

(Extract of a letter dated *Manassas City, June 21.*)

The army worm is making dreadful ravages in this county and in some other parts of the state, taking whole pieces of wheat and mowing grass nearly clean as they go—or at least so much as to ruin the crop. This cut worm has also done very much damage this spring, cutting off almost entire fields of corn. I saved mine by one of the three following operations, or by them all combined. First, by ploughing my bottom lands very early in the spring, say first of March; secondly, ploughing lightly and dragging thoroughly just before planting; and thirdly, I soaked my seed in sulphur water 24 hours before planting. What think you?

I was less fortunate in my garden: the cut worm took almost every thing, and finally I set out a large patch of cabbages and they took them clean. After a good rain I set out more, using as many of the common preventives as I could bear, but all to no purpose; and the second day they had ruined about 200 plants. About 5 o'clock of that day I received your excellent paper at the office, and by the time I reached home I found a remedy recommended; I immediately set about it, and put about a table spoonful (of salt) around the stalk of every remaining plant, and in the morning, to my astonishment, not another plant had been touched, neither has one been injured since. So much for being a subscriber to the New Genesee Farmer. When will all my brother farmers learn wisdom at so cheap a rate.

J. W. SMITH.

We give the above from a valued correspondent, not presuming to endorse it with much confidence, after the trial of a single night. A table spoonful of salt, applied directly to a plant in this way, is quite as likely to kill the plant as the worm. About as much as is recommended to be applied to a pigeon's tail in attempting to catch them, would certainly be much safer. Salt intermixed with the manure or laid near, but not in contact with the plants, may have the desired effect, but on this subject let us have experiments.—*Ed.*

*They only eat herds grass—they do not touch clover

Non-Resident Lands in Michigan.

THE undersigned respectfully announces to the public, that he has opened an Office in this city for the specific object of acting as a general Agent for the payment of Taxes on non-resident Lands, now, or hereafter, to become due, in any of the Counties of this State and he will visit himself, or by a proxy person, each of the Counties, to obtain all necessary information upon the subject, and to see that the persons wishing taxes paid in any of the Counties in Michigan, and forwarding to the undersigned the necessary amount of funds a fee of postage, together with an accurate description of their lands, may rest assured that their interests shall be scrupulously attended to.

His charges with all taxes be reasonable, and proportioned to the services rendered. The undersigned will endeavor to make himself thoroughly acquainted with the value of Lands in every part of the State that he may be enabled to give information to all enquirers in this respect, will undertake the sale of the same. He begs leave most respectfully to refer as to character, and capacity, to redeem the pledges above given, to the annexed certificates.

J. L. WHITING.

Detroit, March 4, 1840.

I think such an office as is proposed by Dr. J. L. Whiting is highly necessary for the convenience of the community, and that he is exceedingly well qualified by long residence in Michigan, his knowledge of the country, strict integrity, a correct business habits, &c. the duties of the proposed Agency.

Pres't of Michigan.
I concur fully in the sentiments and opinions expressed in the above note of Mr. J. L. Whiting. Detroit March 5, 1840.
WM. A. O'BRIEN, Governor of Michigan.
I have been acquainted with Dr. J. L. Whiting for many years, and fully concur in the views above expressed by Mr. Townbridge.
E. FARNSWORTH, Chancellor.

Sayings and Doings, No. 1.—Wintering Sheep.

MR. EDITOR—It was a saying, it is said, of the notorious Sam Patch, "that some things could be done as well as others." This last fatal leap from the falls of your beautiful city, tells us that the maxim is true in part only. He had already, by his famous leaps, sufficiently immortalized himself. They were considered hazardous experiments—being repeated, they ended in a sacrifice of life.

Thus are we reminded, that, though many things may be accomplished, they should never be attempted—and that we should always avoid all rash and hazardous experiments. I do not wish to be understood as being hostile to all "experimenting and improvement," nor do I wish to be forever plodding and digging after something new. Well would it be for us all, if we would exercise a little caution and a study, and were less daring and adventurous. So much for an introduction.

At the commencement of the winter of '41, fearing that I had not sufficient feed provided to keep all my stock in good condition through the winter, I was forced upon an untried experiment,—of keeping my flocks of sheep on oats and straw. I am aware that sheep had been kept on grain and straw through a part of the winter, with success; still I was apprehensive of evil in feeding on grain and straw exclusively, through the entire winter—as they were ewes, of mature age, and with lamb.

I gave to a flock of 105, one bushel of clean or threshed oats per day, and what wheat straw they needed—fed in boxes. (For description and diagram see My No. of the Calculator.)

And now need I say, Mr. Editor, that when a boy I was shepherd, a young man, still a shepherd, for I fed my flocks! With an experience of 12 or 15 years in sheep husbandry, I am prepared to speak knowingly, (excluding all boasting) that I never knew a flock that were wintered on hay, that were finer in appearance and condition. The sheep, of course, were protected, their appetite at all times was good, devoting their food with great lucidity—consuming all, and using boxes, wasting none—and in candor, there was no appearance of sickness or disease among them, and their progeny were strong and thrifty.

And now let the credulous and unbelieving follow me a little farther, while I prove, I throw to their satisfaction, that sheep may be wintered more cheaply on grain and straw, than they can be on hay.

In my estimate of the expense of wintering a flock of 100 sheep, of mature age, I deem 12 tons of good hay barely sufficient, if fed as they should be; however, taking it for granted that it is enough, in few words, the account stands thus:

12 tons of hay, at \$5 per ton, \$72 00

I fed to the flock in question, (perhaps I should not omit to say they were high grade Saxons) 105, one bushel of clean or threshed oats per day—150 days—the oats were worth two shillings per bushel and no more.

150 bushels of oats at 25 cents, \$37 50

15 loads of straw, 15 00

\$52 50

We find, therefore, the expense of feeding oats to be \$52 50, and a saving of \$19 50,—a small item it is true, but worth looking after in these times.

I followed up my experiment of '41, and kept the past winter a flock of 750 of the same description of sheep, and succeeded equal to my expectations. Instead of giving them oats exclusively, I gave an equal quantity of bran, and again had a difference quite as great as before.

75 bushels of oats at 34 cents, \$25 50

75 do bran at 6 cents, 4 50

15 loads of straw,	15 00
Feeding hay in the same quantity and proportion as above, we should have used	\$45 00
9 tons, at \$7 per ton,	\$63 00
Making a difference of	\$18 00

The average price of oats this winter in Tompkins county, is 34 cents, and hay has sold abundantly for \$7 per ton. Another small item, you perceive, Mr. Editor, and if economy be the watch word of every farmer, then let us look to these things, and disregard them not.

Yours, &c.

C. M.

Ludlowville, May, 1842.

The above communication we consider well deserving the attention of farmers. Feeding upon hay exclusively must be considered, in respect to almost all animals, as the most expensive of all feed. A large portion of the stock in Great Britain we suppose is kept upon straw and turnips, and much of it fattened upon the same feed. It were very much to be desired that our farmers should raise some succulent feed for their stock, to mix, during our long winters, with their dry feed. On the ground of economy, as well as regard to the health of their animals, this may be strongly urged upon them. We have made repeated experiments in feeding horses and oxen upon cut straw and meal, and have found it a great saving, certainly a third of the expense, over the mode of feeding them with hay. We shall subjoin to Mr. Morell's account, a statement of Mr. Bard on the same subject, published in the Memoirs of the New York State Agricultural Society, vol. II, which is confirmatory of the results of the experiment detailed above.

Letter from W. Bard, Esq., on Wintering Sheep on Cut Straw and Meal.

MY DEAR SIR—Though late to do so, I will now answer the inquiry you make relative to the manner in which I fed my sheep last winter. I was fearful of wanting hay before spring, and determined to try the experiment of feeding a flock of one hundred wethers on cut straw and Indian meal. I began when they were first put up for the winter, and continued one pen of feeding till they were turned out in the spring on pasture. I allowed six quarts of straw and half a pint of Indian meal, mixed with water, to each sheep per day; it was fed at three times. Now and then, they had an animal of hay thrown to them, perhaps 2 1/2 wt. in the course of the winter. I lost none of them. When turned to pasture they were in good health, and apparently as active and strong as any other sheep. They sheared about three pounds of wool per head. Their bodies were not swelled like the bellies of my other sheep which had hay and water; they had no gummings I did not notice. Whether this was owing to the quality of the food, to their not being allowed enough of it, or to their not getting through the winter any water, excepting the little that mixed the straw and meal, I can not tell.

I have somewhat altered my plan of feeding this winter. I feed all my sheep—round once a day, in the morning, with hay, and give them meal and straw in the middle of the day and at night, allowing them two thirds the quantity of meal and straw per day which I allowed them last winter. I consider this higher feeding, and the mixing long and short feed may be an advantage. I shall be better able to say in the spring which I like best; at present my sheep look very well; they are fond of the meal and straw. One man tends 120, and cuts the straw for them.

I remain, with great respect,

Your obedient servant,

WM. BARD.

To G. W. Featherstonhaugh.

Winter Farm Management.

FRIEND BATHAM—Agreeably to your request and my promise, I herewith send you a few facts in relation to that subject of subjects, Agriculture. And I must here premise that in all my life I have written but three articles for publication, and that last year was the commencement of my farming operations. I was necessarily absent much of the season, consequently, as you will perceive, I am rather green in

both departments of the above named business. I make no pretensions to agricultural knowledge, except what I have learned from my numerous agricultural works and a few months observation, and as the result of which allow me to state a few facts, and first in relation to the manner in which I have wintered my stock.

This consists of twenty-six head of cattle, principally full blooded and grade Durhams, and twelve horses, nearly all thorough bred. Four of the horses have been worked and kept at hay and grain all the time, and two others part of the winter, the remainder of the entire stock have been securely tied up during the night under good sheds, and regularly fed twice a day; in strong plank mangers, with as much corn stalks, cut up at the roots, as they could eat; on which, after being cut up in a cutting box about one inch long and properly wet, has been put corn and cob meal, nicely incorporated with it, at the rate of four quarts to each animal daily, or about two quarts of Indian meal.

Perhaps some one will say that that amount of meal with plenty of good hay, would have answered just as well, and saved all the time and trouble of cutting and preparing the food; but hold on friend, we'll make a "pint" there. Hay is worth here fourteen dollars per ton. Now according to the usual estimate in such cases, my stock would have consumed about fifty tons of hay, amounting to, at that price, seven hundred dollars. My corn stalks were cut from fourteen acres of corn ground, when the corn was newly glazed, all sound and in good condition. The expense of carting the stalks to my barn I consider more than paid, in the advantage and pleasure of cultivating the crop the following year, when compared with the slovenly manner so often adopted in Ohio, in having a corn swamp in the field to clog the plough, confuse the team, and after the corn is ready to plough and hoe, at least two boys ought to follow the plough to act as rearmen, and to bind up the broken backs of the young corn.

But we will say corn stalks from 14 acres, at

\$5 per acre, 70 00

Five months, or 150 days feeding 32 head, 4 quarts per day each, corn and cob meal 600 bushels; corn worth here 25 cents,

120 00

corn and cob meal say 20 cents, Extra expense between cutting stalks and foddering hay 20 shillings per month for 5 months or 150 days,

12 50

Making the expense of wintering my stock on stalks and meal,

\$202 50

Which, when taken from the estimate above

of \$700, leaves the snug sum of \$498 00

Again, during the forepart of March I had a job of work which I wanted done with dispatch, and no time seemed to be left for cutting stalks, and I told my foreman to give my stock their usual quantity of meal with as much good hay as they would eat. This lasted about a week or ten days, and at the end of the time I was astonished when told by the wife of my foreman that the milch cows had decreased over one half in their milk. We immediately returned to the usual feed and with it returned the usual quantity of milk.

Again—a very important consideration, to me at least, is that my stock are all fat; many of them good beef; and I don't believe that with all the good hay they could eat, even with the above quantity of meal per day, they would have been in as good condition. Several of my ewes, which will calve in from four to six weeks, now give from six to eight quarts of milk daily. The beautiful patent cutting box which you sent me last fall, I consider one of the greatest improvements of the age; it has cut all my corn stalks

butts and all, together with much other stuff, and has never cost me a shilling for repairs. A man can, in one hour, cut 40 bushels with it; but this season I design getting a portable horse power, which, when attached to it, can cut up a small 'haymow' of corn stalks in a short time. And now friend, have I settled that "pint"—\$590 saved in hay—fat cattle, plenty of milk, lots of butter to sell every week at 15c. 6d. to 25c. per lb., while it is scarce, and any quantity of manure to return to that land which my neighbors told me I would ruin by taking off that cane brake, and fat tenants to draw it. I had designed mentioning other subjects, but as this has been extended beyond its designed limits, I must postpone their consideration until some future time.

I remain very respectfully yours,

JNO. W. SMITH.

Kaag's Farm, Maumee City, 1812.

The subjoined article from the Farmer's Gazette, published at New Haven, is entitled to particular attention as from one of the most intelligent friends of Agricultural Improvement in the state of Connecticut, upon whose carefulness and exactness in experimenting and reporting his experiments, entire reliance may be placed.—*Ed.*

USE OF PLASTER.

MR. STOKER.—In answer to the inquiry of your subscriber from Cheshire, as to the best time to sow Plaster of Paris, I will give the result of my observation and experience, and detail the mode and the time of its application, without in every instance stopping to assign the reasons, since that would render my communication of an unmeasurable length. By the way, the inquiry in its form, is as pertinent as it would be to ask, "when is the best time for a man to sneeze?" as if a man might sneeze but once a year.

A vague impression has prevailed that this article is of little value as a manure near the sea shore; yet no detailed experiments have been tried which all favor that idea. On the contrary, when they have been carefully made, results directly the reverse have been obtained.

The truth is, as suggested in the report of the Executive Committee of the Agricultural Society published in your paper last fall, and, as stated in the "Transactions of the Society for promoting Agriculture in Connecticut," referred to by you in your last number, too little attention is paid to the manner in which plaster is ground.

All the ground plaster I have been able to find in this city is brought in casks from Maine, and is little finer than sand. In that condition it is of trifling value.

Plaster will in time be dissolved in some two thousand times its weight of water; but if in that state in what time, if ever, it will receive the requisite quantity of water, in such condition and at such temperature as will dissolve it, I leave it to your readers to conjecture. One thing is certain, that it is of no value unless dissolved, since it is supposed that its utility arises in a great measure from its uniting with and absorption of ammonia from snow and rain. This it is evident it can not do while it remains in the form of sand. If however the article is perfectly floured—no ground so fine that it has a rich oily feeling and no grit can be perceived between the fingers, it is perfectly obvious to any one who will observe and reflect, that it is far better adapted for immediate and powerful effect. Not until plaster thus ground is proved by actual and careful experiment to be of no value on the sea coast, shall I at all doubt that the opinion which now prevails arises from causes here pointed out.

To me this is the more obvious from an examination of the extent of this opinion. Around our city, and so far in the interior as ground plaster is carried from here, this belief exists. Twenty miles northward, where the article is obtained from Mr. Moore's Mills in Berlin, in its most perfect condition for use, it is considered indispensable. So also in the western and north-western portions of the county, where it is procured from Derby, and is said to be well ground, it is used in very considerable quantities, and with evident benefit.

Plaster may be sown to advantage on meadows in the fall, where it is not liable to be washed away. It then combines with the ammonia in the snows and abundant rains of winter and spring. If not sown in the fall or winter, it is well to sow it upon a light snow if possible in the spring. Permit me also to remark,

that this is the best time to sow grass seed,—clover for instance, on grain lands sown in the fall previous, when from any circumstance it is not deemed expedient to sow the grass seed with the grain in the fall.

On the ground sown with grass seed, it is important that the young plants should receive the benefit of its application as early as may be in the spring.

Many persons have tried plaster on pasture grounds, and have found, as they think, no advantage from its use; and why? They sow a part of a lot on which cattle run at large, expecting of course the feed on the part thus sown to be much fresher and fuller through the season; but as they in fact find the herbage shorter and apparently less durable, they very naturally infer that the plaster does no good. More careful attention would convince them that there is more in this matter than they dream of. The cattle soon ascertain the part on which the plaster was sown, on account of the superior sweetness and succulence of the herbage, and are found feeding continually upon it. Thus I have seen beautifully illustrated on my own farm, by sowing in different years different lots out of a range in which stock was pastured. The cattle always made their head quarters in the lot which had received the plaster, and kept the feed short in that while it was abundant in the others.

On pastures it is also well to sow early, because of the more frequent rains of the spring. Some farmers, however, whose pastures are abundant in the spring, and early summer, reserve their plaster until near the close of summer in order to induce a fresh growth for fall feed. Many also, who have tried sowing early in the spring, and also in the fall, think that they derive more advantage in that way, than from sowing an equal quantity at one time.

Seed corn should be soaked in a solution of sulphate and rolled in plaster. As soon as it is fully up, the corn should have a careful hoeing, and about a teaspoonful of plaster to each hill, or about one bushel to the acre. It should be scattered round the corn as much as is convenient in putting it on. If sown broadcast, the immediate effect is less, but the final result is about the same.

Pointers should either be wet and rolled in plaster, or a small quantity should be thrown into the hill upon the seed before covering. Here I can not but beg of our farmers not to expose their seed pointers to the rays of the sun, even for a single hour, since, unless the land be moist or the season prove exceedingly wet, the crop may be entirely ruined by so doing, and will under any circumstances be greatly retarded and lessened. Pointers are benefited by larger quantities than are requisite for corn, and the application to them after hoeing should be liberal. From my own experience, and that of my neighbors, I consider plaster indispensable for this crop.

The farmers of this county are yet to learn the secret of raising potatoes, if, as I am led to believe, the average crop is less than two hundred bushels. Five hundred bushels have often been obtained from the acre in other parts of our state; and why not in this county? Some of our best land ought to produce as much as any other.

I have never perceived any beneficial effects from the direct application of plaster to rye, oats, or wheat, although those crops have been exceedingly fine on land which had previously been improved by the liberal use of plaster.

Turnep seed may with advantage be mingled with plaster at the rate of one bushel of plaster to the acre, and be sown broadcast in the field. The crop will be greatly benefited, and the seed easily and evenly sown if due care is exercised.

Plaster may also be used with great benefit on buckwheat. The seed should be prepared as seed corn, and plaster should be sown broadcast upon the young plants as they appear.

From a series of experiments in my garden last season, with plaster saturated with urine, I am satisfied that a great accession of the most powerful manure may be made to the farmer's stock, by strewn plaster in stables and elsewhere, so as to absorb all the urine. In this way, if his manure when thrown from his stable is protected from the rain, even by a sled only, he may obtain a great amount, little if any inferior to the best good podrette which sells at two dollars the barrel.

I wish it to be distinctly understood, that when I recommend Plaster of Paris, and speak of its effects, I refer only to that which is ground so fine as the finest flour. No other, as I view it, is worth the trouble of putting on to the land.

CHARLES ROBINSON.

New Haven, March 23d, 1842

White Weed, or Ox-Eyed Daisy.

MR. EDITOR.—Will you or some of your correspondents have the goodness to inform me of the best method of exterminating white weed from fields and pasture lands?

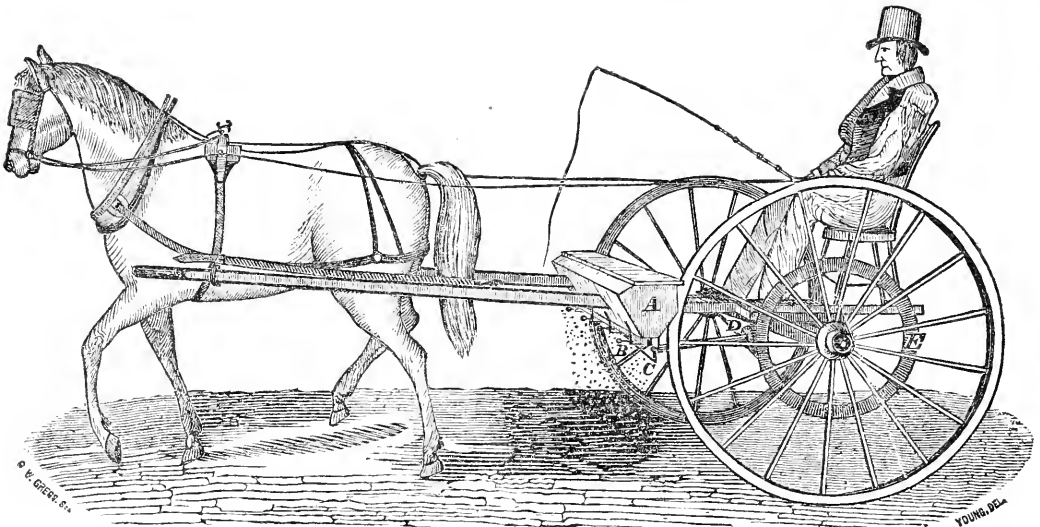
A YOUNG FARMER.

We know no better way than to cultivate the land a year or two, and then lay it down with clean seed. In a barn yard where this weed is mixed with the hay that is used, the manure will of course be filled with the seed; or where manure is purchased from city stables, as in the neighborhood of Boston for example, where this weed abounds, this manure is undoubtedly in many cases surcharged with the seed. If the land is cultivated with corn for example, and kept thoroughly clean, and the ensuing year sowed with grain, without manure, and laid down as we observed above with clean seed, it will be mainly extirpated; but if any appears among the grass, we know no other way than to root it out thoroughly as fast as it appears by hand or hoe. Some farmers do not object to it as hay. Cattle and horses will eat some portion of it when cut early; but its free growth very much diminishes the crop of hay; and putting before them the best mixture you can find of herbs-grass, red-top and clover, and an equal quantity of white weed in the best cured state, and we think they, brutes as they are, will have no difficulty in making a choice. We in such cases, if left to us, should be very apt to follow our nose.

Swiss Bulls and Cows.

The Swiss Cows have been much celebrated for their milking qualities, and a friend of ours, who has resided in Switzerland, has spoken of them in the most extravagant terms as exceeding anything known. We concluded that he had never stood by the pail and that his glasses were of the very highest magnifying power. Another friend of ours, from these representations, was induced to write to Fellenberg, at the celebrated school at Hofwyl, in order to procure some of this stock. The difficulty of procuring and sending the animals at that time, prevented the success of the application. From Fellenberg's letter, which was at one time in our possession, we inferred that the statements commonly made of their yield, were not a little exaggerated; and the product of the cows, though very large, was not unsurpassed. If we understood the measures, their average yield in the best of the season, was about sixteen quarts per day, and from seven to eight quarts through the year. Fellenberg seemed to have no disposition to exaggerate their good qualities. The breeders in England will, beyond a doubt, bring them to a fair trial, and determine the question of their superiority.

"Swiss Bulls."—We are authorised to make known, that four first rate two year old Swiss bulls, purchased for Sir Francis Mackenzie by Professor Agassiz, of Neuchâtel, and which, after a search of many months by the best judges, were selected without regard to any limitation of price, as the very best all Switzerland could produce, are now on their way down the Rhine for London, where Sir F. has desired that all amateurs may have an opportunity of seeing them. Two of them are destined for Scotland; the other two Sir F. wishes to dispose of in England, at whatever may be deemed a fair price, even should he not be remunerated for his expense and their cost, as he feels certain from what he has often seen in Switzerland of the beauty of their two breeds of cattle, combining great milking with fattening qualities—a thing so very desirable—that their blood could be crossed most advantageously to the improvement of our short-horns and other breeds. The best proof of their milking quality is, that no other cow is kept in Lombardy at so low a price as these making dairies—and their shape will be seen by all good judges to show good fattening qualities. They will leave Basle about the 15th of May by steam, and may be expected in London about the 20th. Mr. P. Hanbury, letter, 15 Albany, will give information as to where they can be seen, or at 60, Lombard-street. They can remain in London but a very short time."—*Chateau de Talhouet, May 6th, 1842.*



HATCH'S SOWING MACHINE.

Having disposed of quite a number of these machines during the past season, they are now becoming extensively known, and the demand for them is rapidly increasing; the inventor has therefore increased his facilities for manufacturing, and is now prepared to furnish machines to order, at short notice. Every farmer is aware that sowing of grain by hand is one of the most laborious and difficult operations of his profession, and one which but few men can perform correctly. This machine will sow all kinds of grain, grass seed and plaster, at any desired rate, from four quarts to four bushels per acre; and a man or smart boy, with a horse, will sow 25 acres per day. Besides the saving of time and labor, the product of the crop is increased by the perfect evenness with which it deposits the seed. The machines are made in the best manner and warranted—price \$40.

It should here be observed that two or three of the machines first sold in this region were somewhat defective, and a few individuals may in consequence have been prejudiced against the invention. Others have complained that the machines would not sow deep plaster, but the inventor assures the public that this, and all other objections, are now obviated, as he will convince those who will apply to him.

State and County Rights will be sold on very favorable terms to any enterprising mechanics. Any infringements will be strictly attended to. All letters must be post paid. Address

JULIUS HATCH, Rochester, N. Y.

Instead of publishing the numerous and highly respectable certificates and recommendations which might be obtained, the inventor respectfully solicits farmers to call on any of the following well known gentlemen who possess the machines.

Rawson Harmon, Jr., Sylvester Harmon, Elisha Harmon, Henry Rogers, Daniel Rogers, Isaac Cox, Woodland.

T. H. Newbold, Caledonia.
Isaac Lacy, Chili.
Mirvin Smith, Mendon.
H. Fellows, Samuel Miller, Penfield.
John Moxen, Asa Rowe, Greece.
Chester Scott, Elm.
Alva S. Hoyt, Brant.
Jesse Adams, Rostford.
Jacob Clapp, Rush.
Aaron Burke, Igha.
H. Morrison, Parma.
David Brooks, Avon.
Wm. W. Corban, Canandaigua.
P. L. Buncel, Victor.
J. W. Smith, Monroe City, Ohio.
John Johnston, Florence, Mich.
T. C. Leggett, Glens, Ill.
J. M. Sherwood, Auburn.
As Mr. Hatch is not very extensively known, I

cheerfully state that from an intimate acquaintance of the year past, I believe him to be a man of honor and integrity; and having repeatedly seen his machine in operation, I do not hesitate to pronounce it the best machine in use for the purpose. I have also conversed with several farmers who have purchased and used them, and they express the highest satisfaction.

M. R. BATHAM.

Rochester Seed Store, June, 1842.

HUSSEY'S REAPING MACHINE.

Having had frequent communications from Western Farmers, to know if I could not deliver my Reaping Machine in Rochester for \$120; I would inform them that I have two now in Rochester, which can be had for that price, by calling on J. B. Cox, Watts & Co. Orders for others at the same price will be duly received.

THOMAS R. HUSSEY.

Argues, N. Y. June, 1842.

ROAD OR DIRT SCRAPER.

May be had at the Rochester Eagle Furnace. Price wood-lined, \$5. No. 200 without wheeling, \$2.50.

A. J. LANGWORTHY.

Ruta Baga and Turnip Seed.

A NEW supply of genuine imported purple top Ruta Baga Seed—also a full assortment of English and Scotch Turnip Seeds, for sale at the Rochester Seed Store and its agencies.

WHITE DUTCH (LOVER SEED), a fresh supply, received at the Seed Store.

SILK WORM EGGS, of the large Sulphur and Peanut varieties, for sale at the Seed Store \$1 per ounce.

June 1. M. B. BATHAM.

Garden, Field, and Flower Seeds.

THE subscriber having established a large Seed Garden about one mile from the city, on Monroe Street, would say to his old customers and other, that he is prepared to receive orders for seeds, at wholesale or retail, on the most reasonable terms. By his long experience in the business in the Shaker Seed Garden at New Lebanon, and a determination to offer seeds as good as such as are raised under his immediate inspection or imported from the most respectable establishments in Europe, and their vitality carefully tested, he is therefore confidently expected to give complete and satisfaction to all who may favor him with their patronage.

Orders for Fruit and Ornamental Trees, Flowering Shrubs, and Green House plants, promptly executed in their season. Selection made by the proprietor when requested.

Rochester, June 1. C. F. CROSMAN.

Rochester Plough Manufactory.

A NEW and superior kind of ploughs of the most approved patterns, such as the Genesee, Cayuga County, Gibson's, Woods', Reids' Side Hill and Stager ploughs, also, Cultivators, Reversing Horse Rakes, Road Scrapers, and Hand Wheel Ploughs.

June 1. C. P. D. WRIGHT & CO.

PLOUGH.

A NEW and SUPERIOR KIND OF PLOUGHS, (two sizes) designed for breaking up summer fallow, may be purchased at the Rochester Eagle Furnace—price \$4 and \$7 each. Wood and other produce taken in exchange.

A. J. LANGWORTHY.

WHALE OIL SOAP—for destroying Bugs and Insects in Gardens, (see New Genesee Farmer, Vol. 2, p. 112) For sale at the Rochester Seed Store.

ROCHESTER PRICES CURRENT.

CORRECTED FOR

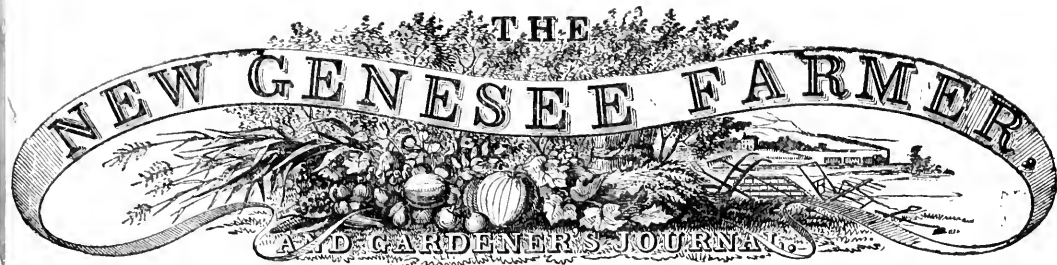
THE NEW GENESEE FARMER, JULY 1, 1842.

WHEAT,.... per bushel,.....	\$ 1.19 a	\$ 1.22
CORN,..... ".....	41.....	44
OATS,..... ".....	28.....	28
BARLEY,..... ".....	38.....	41
RYE,..... ".....	53.....	56
BEANS, White,..... ".....	73.....	100
POTATOES,..... ".....	85.....	84
APPLES, Desert,..... ".....	62.....	75
FLOUR, Superior, per bbl.,.....	5.38.....	5.50
" Fine,..... ".....	5.00.....	
SALT,..... ".....	1.25.....	
PORK, Mess.,..... ".....	8.50.....	9.00
" per 100 lbs.,..... ".....	3.00.....	
BEEF,..... per 100 lbs.,.....	3.50.....	
POULTRY,..... per dozen,.....	7.....	
EGGS,..... per dozen,.....	9.....	10
BUTTER, Fresh,..... per pound,.....	10.....	12½
" Frying,..... ".....	10.....	
CHEESE,..... ".....	6.....	7
LARD,..... ".....	7.....	8
TALLOW, Clear,..... ".....	8.....	
HIDES, Green,..... ".....	4.....	4½
PEAT ASHES,..... 100 lbs.,.....	5.00.....	
POT,..... ".....	4.75.....	
WOOL,..... pound,.....	23.....	30
HAY,..... ton,.....	60.....	10.00
GRASS SEED,..... bushel,.....	1.50.....	1.75
CLOVER SEED,..... ".....	5.50.....	6.00

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From the Power-Press of John I. Reilly & Co.



M. B. BATEHAM, Proprietor. { VOL. 3.

ROCHESTER, AUGUST, 1842.

NO. 8. { HENRY COLMAN, Editor.

PUBLISHED MONTHLY.

TERMS.

FIFTY CENTS, per year, payable always in advance. Post Masters, Agents, and others, sending current money free of postage, will receive three copies for \$3.—Twelve copies for \$5.—Twenty-free copies for \$10.

The postage of this paper is only one cent to any place within this state, and one and a half cents to any part of the United States. Address M. B. BATEHAM or H. COLMAN, Rochester

METEOROLOGICAL OBSERVATIONS.

MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY L. WETHERELL, JULY, 1842.

Date.	Thermometer.			Mean.	Winds.		Weather.		Rain Gauge	
	Surface.	1 to 6 clock, p.m.	1 h. above ground.		A. M.	P. M.	A. M.	P. M.		
26	63	82	63	68.66	n	n	cl'dy	sh'w	15	
27	59	66	62	61.66	n	vari.	sh'w	sh'w	12	
28	57	76	66	65.66	n	n	cl'dy	rain	10	
29	53	72	59	61.66	w	n	fair	fair	.08	
30	53	70	70	72.33	s	w	cl'dy	sh'w	.25	
1	67	68	59	63.16	n	n	cl'dy	rain	.10	
2	58	75	61	65.83	n	n	rain	fair	.71	
3	60	81	61	68.33	s	w	fair	rain	.10	
4	63	73	60	67.16	w	w	fair	rain	.07	
5	64	65	60	61.33	n	n	cl'dy	rain	.16	
6	54	63	62	55.5	n	n	cl'dy	fair	.10	
7	46	72	57	60.33	e	w	fair	fair	.10	
8	58	77	68	67.33	s	w	cl'dy	rain	.60	
9	56	65	58	60.	w	n	rain	fair	.72	
10	58	71	58	60.33	w	n	fair	fair	.10	
11	52	75	62	61.	n	n	fair	fair	.10	
12	55	83	68	70.83	s	n	fair	fair	.10	
13	58	87	72	74.66	s	n	f	fair	.10	
14	65	72	63	65.83	n	w	n	cl'dy	fair	.10
15	60	11	58	62.5	n	n	n	fair	fair	.10
16	57	78	70	69.83	n	n	n	fair	fair	.10
17	66	86	70	74.	n	w	n	fair	fair	.10
18	66	88	72	76.	n	w	n	fair	fair	.10
19	70	91	70	75.33	n	w	n	fair	fair	.10
20	60	68	59	61.16	n	n	n	fair	fair	.10
21	53	74	59	62.5	s	w	n	fair	fair	.10
22	56	84	70	71.5	s	w	n	fair	fair	.10
23	65	89	74	77.16	s	w	n	fair	fair	.10
24	72	76	66	68.66	n	n	sh'w	fair	.25	
25	66	72	58	62.66	n	w	n	cl'dy	.10	

Range of thermometer for the month, 45 degrees.

Mean temperature of June 1842, 60.66 "

" " " 1841, 67.62 "

" " " 1840, 63.81 "

Rain Gauge, June 26, to July 25, 1842, 3.12 inches.

" " " 1841, 2.77 "

" " " 1840, 3.55 "

Remarks on the weather and progress of vegetation, commencing June 26th and ending July 25th.

June 26th, shower at 2 o'clock, P. M., with thunder and wind; 27th, thunder this morning at 6; 29th, thunder showers in the evening; 30th, showers with thunder at 5 o'clock, P. M.

July, the seventh month of the year, so called from Julius, the surname of Cains Cesar, who was born in this month. Before that time, this month was called Quintilis, or the fifth month from March.

July 1st, rain; 2d, rain in the forenoon, clear in the

afternoon; 3d, a shower with thunder at 6, P. M., Aurora Borealis this evening; 4th, fair; river high; 7th, farmers have commenced haying; 8th, thunder showers at 1 and 2 1/2 o'clock, P. M.; 9th, very rainy last night; clears off this afternoon; 14th, a little sprinkle; no rain from the 15th to the 24th; 24th, thunder showers in the morning.

Corn is small, but has grown very fast for the last 10 days; corn in silk the 16th; last year it was in silk much earlier. Farmers commenced harvesting about the 20th; green corn in market last year the 16th of July. Whortleberries were in market the 13th. Chestnut trees in blossom the 5th. Tomatoes were ripe the 26th. I have seen no green corn, nor whortleberries, nor tomatoes in market yet.

Chestnut trees in blossom the 20th, much later than last year.

Note.—Venus is now the evening star, and may be seen in the west a little after sunset. Jupiter and Saturn may also be seen; they come to the meridian about 11 o'clock in the evening. Jupiter shines with a white light and is very brilliant. Saturn is of a dim reddish color and comes to the meridian a little before Jupiter.

Royal Agricultural Society of England.

"At a meeting of the Royal Agricultural Society of England, on the 18th of May, in London, on motion of the Duke of Richmond, seconded by Earl Spencer, Prof. Justus Liebig of Giessen, Germany, and Mr. Henry Colman, Agricultural Commissioner of Massachusetts, were unanimously elected honorary members of this Society."

Mr. Colman gratefully appreciates this distinguished honor; an honor much higher than any to which his ambition had ever aspired; and the more highly valued on account of the eminent friends of agriculture at whose instance it has been conferred. Viewed aright, it can serve only as a new stimulus to render oneself deserving of it; and quicken efforts, however humble, to be useful in a cause deeply and inseparably connected with the physical comfort and the moral welfare of mankind.

Agricultural Papers.

In noticing the American Agriculturist in our last number, by an inadvertence we stated that each number consisted of 16 pages. We should have said 32 pages imperial octavo. We are happy to make the correction, as it gives us another opportunity of commending to our readers a publication ably conducted and promising much advantage to the agricultural community. It is published monthly by Geo. A. Peters, New York, and edited jointly by A. B. & R. L. Allen; price one dollar per year.

The cheapness of agricultural publications is a remarkable feature of the times. The American Farmer, the agricultural pioneer, was published at Baltimore for five dollars per year and liberally sustained. Now a New York Farmer, without going out of the State, to which, we hope he will not confine himself, may have the Albany Cultivator, one of the best papers ever printed, the American Agriculturist as

above, the instructive Central Farmer from Rome, and our own humble sheet, which we do our best to make useful, for three dollars per year. To these he may add the excellent and highly useful paper the Northern Light, printed at Albany monthly, and United States Farmers' Journal, printed in New York city, under the able and experienced supervision of Fleet & Blydenburgh, for a trifle more. Few New York farmers, who have a hundred acres of land, are excusable if they do not take all of them; and if they cannot read them themselves, circulate them among their neighbors, in the public schools and reading rooms. How can they do a better service for the cost? Yet strange to say there are many who will not aid us at all; and there are others who threaten to withdraw their patronage, if we happen to differ from them in opinion. There are too, some patterns of liberality and justice, who want to beat us down from 50 to 25 cents. Exquisite magnanimity! men, a million of whose souls could make together a Somerset through the eye of a fine cambric needle without bruising or jostling or crowding. Out upon such meanness! We remember one day, in Boston market, buying of a farmer, who had come two hundred miles, some lump butter as fine as could be made, when one of these folks came up to inquire the price. The current price at the time was from 17 to 20 cents. The reply of the farmer was 12 1/2 cents. Why, said the man, wishing to "beat him down," don't you think that's high? We could not restrain our indignation.—"Throw it at him! throw it at him!" said we, "such a fellow ought to have his broad spread with wheel-grease."

A Liberal and Useful Movement.

The Livingston County Agricultural Society have offered 20 vols. of the Cultivator and 20 do. of the New Genesee Farmer, to be given as gratuitous premiums to the deserving. Allow us to say this is highly creditable to their good judgment. If we recollect aright, the Rhode Island Society for the encouragement of Agriculture and Manufactures, have been accustomed for years to take fifty copies of the New England Farmer for this purpose.

Important Notice.

There is a large amount due us from Post Masters and Agents in the Western States and elsewhere, mostly in small sums it is true, but our whole resources depend on such small sums, and therefore we hope no one will delay sending on that account.

¶ One word to our friends.—We have a large supply of back numbers of the current volume on hand, which ought to be in the hands of subscribers. Will you not help us—would you not be doing your neighbors as well as ourselves a real kindness, by soliciting them to subscribe? The currency is now considerably improved, and bills of most of the states will answer for remittances.

The Stupendous Temperance Reform.—Such is the progress of this reform that the most credulous and enthusiastic laborer in the cause, has been struck dumb by its all-sweeping progress; while the more sceptical looker on, is heard to exclaim, that God is performing a miracle for the cleansing of a leperous generation.

S. W.

Scientific Agriculture.—Letter V.

MANURES.—URATES; FOUDRETTE; GUANO.

One of my chief designs in these letters is to endeavor to elevate the mind of the agriculturist, by bringing him constantly and repeatedly in contact with the higher branches of the pursuit he follows. The names Oxygen, Hydrogen, Nitrogen, &c., may appear at first puzzling to him, but by frequent collision with them, and by the persuasion that they represent substances as distinct, although not quite so tangible, as his own plough or harrow, this appearance will wear off, and he will be gradually brought to pay attention to their operations. When he becomes convinced that the ammonia in his dung heap is its most valuable part, he will exert himself to economize and save it in every possible way. When, by practice and experiment on his own farm, he becomes intimately acquainted with the powers on *his own soil* of the different artificial manures, of nitrate of soda, of Guano, or of the composts under various names now regularly offered for sale as manures in this and other countries, then will he discover the great value of the study of those principles and laws, which, always found to be simplest when best understood, nature has wisely ordained for the regulation and connection of the animal and the vegetable kingdom; a kingdom in the midst of which the farmer passes his whole existence, and in whom, therefore, an ignorance of these laws is only to be excused by want of the means of obtaining a knowledge of them. I will then, at the risk of repetition, and in order more clearly to elucidate what follows, recall a few facts and principles already set forth in these letters, and which cannot become too familiar to every one connected with agriculture. They are that vegetation is chiefly composed of carbon, oxygen, hydrogen and azote or nitrogen, and that this latter substance is principally useful in promoting the digestion of the food absorbed by the vegetable, or in other words of converting this food into its substance and juices; assimilation, as it is most properly called; hence that if a vegetable absorbs more food than it can procure nitrogen to assimilate, all such superabundance is worse than useless, it is injurious. From this it will be seen that during the whole time a plant is growing, (which is this action of assimilation) until the formation of the flower and the fruit, it is necessary that azote should be supplied just as fast as, and for economy not faster than it absorbs its food; that the more of this food is healthily digested or assimilated by means of azote, the larger will be all the parts of the plant, and the greater will be the quantities of saccharine and other juices stored up in the stems, roots, &c., for conversion into flower and fruit, and the larger and finer of course will this flower and fruit be, provided the necessary heat and sun light to ripen these juices be present, and the requisite arrestation of growth of stem and foliage take place as prescribed by nature previous to the formation of these products.

This statement renders quite clear the importance of a constant and abundant supply of azote to vegetation, and will therefore shew the value of urate as a manure. Urine is composed chiefly of Urea with a few extremely useful salts, as sulphate and nitrate of potash, common salt, phosphate and acetate of soda, a little phosphate of lime, and a little muriate and urate of ammonia.

Urea, the chief ingredient of which is uric acid, contains in 60 parts, 19 of Carbon,
25 of Nitrogen,
4 of Hydrogen,
19 of Oxygen,

60

Uric acid contains in 100 parts

36.11 of Carbon,
33.36 of Nitrogen,

231 of Hydrogen,
28.19 of Oxygen.

100

This uric acid combines with various alkaline bases, such as ammonia, soda, potash, &c., and forms salts called urates, thus urate of ammonia, urate of potash, &c. Now one great feature of these urates is their slow solubility in cold water, although some of them particularly urate of ammonia, is very readily soluble in hot water; this is as though nature had said in stamping them with this property, "You are required to supply digestive powers to vegetation, and your quality must be to dissolve only just as fast as you are wanted." We shall see hereafter the value of Silex, Lime, Potash, Soda, &c., with their different salts; on these much discussion does and always will exist; they are all good applications when the soil does not already contain a sufficient quantity of them; but no discussion ever arises respecting animal manure containing nitrogen, no farmer, whatever may be the quality of his soil, ever doubts the value of this—on this the only discussion which arises is as to its economical application. In our Chemical Laboratories by the application of fierce fires, of concentrated acids and alkalies, we can analyze various substances and exhibit to our limited senses their constituent parts, and in many cases we can gain some knowledge of their properties; but nature does not act thus, yet she analyses and separates the same ingredients, by action on infinitely minute particles, such as are entirely invisible to our most powerful microscopic efforts. We analyze for exhibition, she for use. She analyses or forms combinations, and again separates these into their original particles, just as they are wanted by the animal or the vegetable creation, but of her methods of so doing we are at present profoundly ignorant; our chief exertions must be confined to observe her operations and afford ample ingredients for carrying them on. Thus soon after animal urine is voided it begins to ferment; urea and urates are formed; these, applied to the soil, are acted upon by plants, and their constituent parts, nitrogen, oxygen, &c., with their alkaline bases, are separated by them for their growth. The immense value of this material is therefore quite evident, as is also the folly of wasting it. The great practical knowledge now required, is to find the best way of preserving its virtues until wanted for use, and the quantities in which to apply it with the utmost economy and advantage on soils variously constituted. Much experiment is still needed to advance the present infancy of this great practical study. There is a substance existing in immense beds of 60 to 100 feet in thickness on the coast of Peru, called Guano, pronounced something like Huano, with which the people of that country have time out of mind manured their almost barren, sandy soil, and by the help of which they have raised good crops of corn. The recent application of science to agriculture, has caused this substance to undergo investigation for the purpose of ascertaining its value as a manure. Amongst much other valuable information contained in a recent publication of Dr. Dana, of Lowell, may be found the latest and most correct analysis of Guano by Voelckel. It contains in round numbers, About 31 per cent of ammoniacal salts, (amongst them urate of ammonia.)

About 14 per cent of phosphate of lime, the chief ingredient of bone dust.

About 31 per cent of organic substances, such as will form humus or geine.

About 20 per cent of salts of soda, potash, magnesia and lime.

About 4 per cent of sand and clay.

So that according to our present knowledge, it would hardly be possible to concoct a compound of greater apparent power on vegetation. Its operations have

consequently been found so valuable in England, that about 60 vessels are now employed in removing it there from Peru, and it has taken its place in the price currents of that country as an article of standard value. The London price current of the 24th May, observes, "Guano is now dull of sale, though offered at the reduced price of £15 to £16 sterling, about \$60 to \$64 per ton" of 2240 lbs., it used to sell for about \$50. Notwithstanding its immense quantity, it can hardly be any thing else but the excrements of birds, urates never having been found naturally formed, except in animal excrement. It will be observed to contain many of the ingredients of urine. I am not aware that any experiments have been yet made on this substance in this country, but having, by the kindness of a friend, received about a pint of it, just arrived here direct from the coast of Peru, I have applied it to different plants in quantities varying from one sixteenth to one hundredth part of the soil. Two or three plants of delicate habits to which the smallest quantity has been applied, have in 14 days been killed by its too great power; other plants of more robust habit, are evidently getting of a deeper green color in their leaves—all have been most copiously supplied with water. Dr. Lindley, in the London Gardeners' Gazette, states that not much is yet known there on the subject, but advises trials to be made by solutions of it in water; this method, however, is evidently inapplicable to large agricultural operations, besides it is dissolving out the soluble salts and applying them alone by themselves—whereas by intimately mixing with the earth and copiously watering, the roots can act on the substance in the way most congenial to their nature, and the salts are also dissolved. The best way, probably of using it on a large scale, would be either by mixing it thinly spread throughout the manure heap, or strewing it scantily over the ground previous to ploughing. From its intense smell and appearance, it must be a very strong manure, but to what vegetation it will be most advantageous, and how best applied, will require some experience to decide upon. Other artificial manures called Foudrettes, are now commonly known here; they are or ought to be chiefly compounded of night soil with or without animal offal, prepared so as to retain the ammonia, which, although not the only, is yet the chief valuable ingredient. It is obvious that its effects will depend on the proper preparation which it undergoes and on its freedom from adulteration of other substances of little value as manure.

Nitrate of soda, with several other salts of importance in commerce, are found in large quantities in the province of Ttrapaca, Peru, where it never rains.—This district has been visited by Mr. Blake of this city, and much valuable intelligence obtained. Dr. Daubeny, well known in England for the unremitting application of his scientific attainments to the promotion of agriculture, is about quitting England for the purpose of visiting this spot; so that agriculturists may perceive that scientific persons are every where bending all their energies towards the improvement of the cultivation of the soil: it behoves them, therefore, not to be behind hand in endeavoring to second, by their practical experiment, the efforts of these worthy co-laborers. J. E. T.

Boston, July, 1842.

Additional on Daniels' Patent Manure.

In my last letter I gave you my ideas respecting Mr. Daniels' new manure; since then, I have received the specification of the patent; here it is a little abbreviated.

The substances are divided into three classes: First: Ligneous matters, (say sawdust of any wood) also peat, straw, and weeds of any kind.

Second: Bituminous matters; these are, mineral coal, (not anthracite, I am sure, although this is not so

stated,) asphaltum, pitch made from coal tar or other pitch, mineral resin, and also tar.

Third: Animal matter, such as butchers' offal, graves, flesh of any dead animals, also fish.

The ligneous matters are ground to powder—or the same effect may be produced on them by mixture with caustic (unsulphated) lime.

The bituminous matters, when brittle, are ground into powder by machinery; but if sticky like pitch, a small quantity of dry quicklime is added to prevent their sticking to the machine. When these bituminous ingredients are liquid, they are converted into vapour by dry distillation, with which vapor the ligneous matters are saturated. These ligneous matters may be, spent tanners' bark, dyers' spent wool, sawdust, &c. The soft bituminous matters may also be reduced to a state of minute division, by being rendered soluble in water by the addition of caustic alkali—and in this solution the ligneous matters are steeped.

The animal matters are mixed with pulverised ligneous or bituminous ingredients before mentioned, and are then ground into fine powder.

This manure is deposited in the ground with the seed by means of a drilling machine, or scattered over the ground broadcast.

The words within bracket are my additions.

It will be immediately perceived that the particulars in this patent are calculated more to conceal than to disclose the real method of concocting this manure. Still, as the patent right would be vitiated unless all the ingredients were mentioned, there is no doubt that every substance used is given, and that the sulphur, of which I did not see the use, is not amongst them.

There are two ways in which this preparation may be made. The bituminous matters, any or all, may be dry distilled, that is, inclosed in an iron retort and acted on by fire, the ligneous substances exposed to the vapour proceeding from this distillation, and thoroughly saturated with it. Coal gas, for illuminating cities, is produced by dry distillation of bituminous coal. This method, however, would require a regular manufacturing establishment with proper machinery.

When peat, weeds, &c., are used, then with the tar and liquid bituminous matters, they may be operated on by quicklime, and sawdust added,—either of these mixtures, with finely divided animal matters, would no doubt make a rich manure. The principles of the formation of this new manure of Daniels', seem to agree pretty well with those I have laid down—namely, that all ligneous matters containing the basis humus or guano, a source of carbonic acid gas, well saturated with azote, particularly in the form of ammonia, and mixed with alkaline bases, as lime, potash, or soda, are highly important manures, particularly on light sandy soils; and that animal and carbonaceous matters are excellent ingredients to produce this saturation of azote.

Also, as a general rule, that whenever any rich manure, as cow or horse dung, is put on a hill on which plants are to be set, it is an excellent plan to mix a little quick lime with it before covering up. The lime liberates the ammonia, with which the earth around becomes impregnated, and the roots then find their proper food with its digestive power ready for them in abundance. The only precautions necessary, are to guard against the lime coming into contact with the roots, and also to cover up carefully, so that none of the ammonia may escape into the atmosphere.

J. E. T.

Reuben Miner, of Peacham, Vt., has this year produced 612 lbs. of sugar from 80 trees. The sugar producers of Louisiana represented to the Committee on Manufactures, that they cannot produce sugar at less than 5½ cents per pound. If true, the farmers of Vermont can compete with them at a profit.

From the (London) Mark Lane Express.

LIME.

There seems to be a growing difference of opinion as to the state in which lime should be applied to the soil. We have always been of opinion that lime, generally speaking, operates upon the soil in two ways, namely, chemically and mechanically; when it is merely to operate mechanically, as to lighten heavy clay soils, it is of no moment whether it be applied in a caustic state or not; but when intended to act chemically, we hold that it must be applied in a caustic state. We can speak of our own personal experience as to the practice on a very large district, many thousand acres of reclaimed land in the West of England, where lime was the article generally used in the first instance to stimulate the land to fertility. The lime is deposited on the land in heaps a perch apart each way, the heaps of course varying in size according to the quantity per acre intended to be applied, but ordinarily one bushel in each heap. It is then covered with a portion of the soil, and suffered to remain until it begins to slake into powder, and which of course varies in point of time according to the dryness or moisture of the weather; the heaps are then turned, and suffered again to stand until the small impurities are slacked, when it is spread upon the soil whilst yet in a caustic state, and immediately well harrowed into the soil. That it is more effective in a caustic than in an effete state, has been frequently proved in cases where, from some cause, two or three rows in a field have been suffered to remain uncovered, and by being exposed to heavy rain, was run to mortar before spreading; in such cases the difference has been manifest in the crop. We know it is the practice in some districts to mix the lime with head lands, ditch scrapings, and any other mould that can be collected, in large heaps, turning it over, and in due time carting it on the land. The operation of the lime, however, in this mode, is precisely the same as in the mode first described, with this difference, that in the former method the immediate effect is on the soil of the field, in the latter on the soil collected in the heaps with which it is mixed. It has been said that, inasmuch as lime in a caustic state has been found not to be injurious to animal life, it therefore would produce no effect upon the soil; abstractly this may be true, but it is the application of moisture which causes it to operate on the soil, and where water applied in proper quantity, it would immediately become destructive to animal life. This subject is one of great importance to the farmer, and we would strongly recommend those who desire information upon it, to read a chapter on lime in a "Treatise on Manures, their nature, preparation, and application," by John Donaldson, just published by Baldwin, in which the question in all its bearings is treated in a clear, systematic, and practical manner. This chapter is forty pages in length, and forms the best essay on the subject with which we are acquainted, and such as we can with confidence recommend to our readers.

Use of Camels on the Western Prairies.

MR. EDDER—The writer of this is a native of Russia, and has spent many years of his life in that portion of the Empire which borders on the Ural and Volga Rivers, north of the Caspian Sea.

I have, during the last two years visited, many parts of the United States; lately I have been in Missouri, Iowa and Wisconsin, and during my journeyings have had the fact strongly impressed on my mind that the Camel would prove a most valuable animal for burden in those prairies, and especially for traversing the country west even of the States I mention, where water is sometimes not found for days.

Camels used only for voyaging, possess great speed, and in the unsettled country would be found good to carry mails and convey intelligence. Their speed is great, 120 miles being a common day's travel for speedy animals.

Some individuals have expressed to me doubts of their being useful in this latitude. I mention the place of my birth only to show the most doubting that, in a more rigorous clime, they are extensively used. The breeding of camels is not more expensive than horses.

You no doubt are informed with regard to this subject, and I am convinced can give to persons desirous of breeding the camel, valuable information through the medium of your journal. They (the camel) can

be obtained on the Black Sea, and if Agricultural Societies would import a few pairs, they would confer a great advantage on this country.

From 600 to 1000 pounds, with a rider, is a common load for the camel; and the commonest herbage, even weeds and twigs, will suffice for their sustenance while enduring the severest labors.

I was advised by some gentlemen, to whom I casually mentioned this subject, to write to some editor of an agricultural paper of this matter, and being about to go to the east through Canada, have thought best to write to you from this place.

Yours, with respect,

H. BOHLIN.

Buffalo, July 6th, 1842.

The statements in the foregoing letter certainly deserve attention. The facts given in respect to the speed of the camel, their strength and capacity for burden, their endurance of fatigue, and the cheapness of their support, are well established. They are as susceptible of training as the horse. They are of a mild and peaceable disposition, and live to a great age. We had supposed that they could not endure our climate, but the statement of the writer of this letter shows that it is otherwise. That they would be useful on the prairies and in the long journeys now constantly undertaken in the vast and unsettled plains towards the Rocky Mountains, into Mexico, and other territories, now and likely to remain impenetrable by carriages, it would seem but reasonable to believe. On first reading this communication, we were disposed to regard it as mere matter of romance; but upon reflection we cannot but think it is worthy of consideration. The only great difficulty would be in first importing them. This has been done, however, in several instances; and with proper care and management, the race might, for any thing we can see, be as easily extended as the race of oxen or of horses.—Ed.

Native Silk.

The Cincinnati Gazette gives the following statement of facts showing the progress of the silk business in this country, as indicated by the bounties annually paid in the several States:

"In Ohio the bounty paid to silk growers in

1839 was.....	\$71 10
1841 was.....	2681 76

The whole amount of reeled silk produced last year is set down at 3000 pounds. In Massachusetts the bounty paid is

1836 was.....	\$85 20
1839 was.....	439 99
1841 was.....	4675 10

In New York, the increase in the quantity of cocoons produced, has been very rapid, in 1840 being 2000 pounds, while in 1841 it was 6426 pounds.

In Pennsylvania, the bounty paid is

1840 was.....	\$2101 80
1841 was.....	4418 55

The Rev. Frederick A. Ross has probably raised more silk than any other person in the country. During the last year he sold 300 pounds of reeled silk in Burlington, N. J., for \$1600. A silk filature has been recently established in Philadelphia."

Wool and Protection.

Your memorialists respectfully suggest, that the introduction of every yard of broadcloth into this country, is the introduction of two and a half pounds of wool into the country,—and the introduction of every yard of beaver and pilot cloths is the introduction of from three to four pounds of wool into the country, and each such yard of cloth foregoes the income of an acre of land of the American farmer, and of course employs the acre of land of the foreigner.

As citizens of this great Republic, we are entitled to our own market; we are entitled to the cultivation of our own lands—to the employment of our own labor; these are not unreasonable privileges, and to deny them is to destroy the arts of peace and prosperity.—Manufacturers' Memorial.

On Daniels' Artificial Manure.

The subjoined communication refers to the remarks of our correspondent J. E. T. in our July number. These remarks it will be seen are in some measure qualified in his communication of this month, made after having become more acquainted with the actual constituents of this celebrated manure. We give place to this communication from the highest authority, with great pleasure. Dr. Dana's valuable book, the *Muck Manual*, has not yet received that attention in our columns which is due, and which we design to give to it. This is owing to repeated disappointments in "promises to pay" on the part of our correspondents. In that book is illustrated more fully the "action of carbonic acid" upon silicates, which Dr. Dana refers to in this letter as of so great importance. We shall presently give his views of it more at large, leaving to others to determine how well they are founded.

Of this book, the *Muck Manual* for Farmers, by S. L. Dana, we find the subjoined notice in the July number of *Silliman's Journal of Science*, which we have no doubt is from the pen of Professor Hitchcock.

"In conclusion, we can cordially recommend this work to our agricultural friends for its practical character. It is not saying too much to assert, that Dr. Dana has done for the farmer in this treatise, what Dr. Bowditch did for the sailor when he published his *Practical Navigator*. In this respect this treatise contrasts strongly with such a work as that of Liebig on the Organic Chemistry of Agriculture, &c., which, notwithstanding its originality and the philosophical beauty of its theories, is apt to make the impression upon the farmer that he is not at present to expect much from agricultural chemistry but ingenious conjecture. We are sure that Dr. Dana's work will remove this impression, while on the other hand, the chemist will see in it evidence of the rapid advance of this science. Within two years, three able European chemists, Liebig, Daubigny and Johnson, have given to the world most mature and valuable opinions upon it; and now we have a *cis-Atlantic* effort, which will not suffer by a comparison with any other. Truly the genius of agriculture may exult in the bright prospects that are opening before her."

DEAR SIR—The remarks of your correspondent J. E. T. on the "new manure," like all things from his highly gifted pen, are of great value. He does not, however, seem to go to the root of the matter. After showing the value of ammoniacal liquor from gas works, he supposes that the "new manure" may be an attempt to form a substance or mixture, which resembles pit-coal; that this evolves ammonia, by spontaneous decay, as coal does by dry distillation. This is his explanation of the action of the new manure. It is good as far as it goes; but attributes too much to ammonia. When we consider the very small proportion which nitrogen forms of the whole mass of vegetable matter, averaging about 0.173 of the whole mass of cultivated crops, seeds, roots, stalks, &c., when green, and that whatever may be that proportion, nitrogen forms only 14-17 of any portion of ammonia, the quantity of this element, formed by the proportion of the new manure said to be used, must be quite too small to exert such effects as are said to be produced by its use. The proportion of nitrogen in coal is rated too high by J. E. T. Dr. Thomson assigns, according to Henry and Ure, quite too small a portion of oxygen in coal, while his quantity of nitrogen, though estimated according to the best mode of analysis then in use, is much too high. It was probably a mixture of oxygen and nitrogen. Later analyses, conducted on more refined principles by Richardson, give an average of nitrogen and oxygen, of 8.852 in caking, splent, cherry and cannel coal. What proportion these bear to each other, does not appear; but, since Liebig, deducing the composition of coal from woody fibre, by subtracting water, carbonic acid, and carburetted hydrogen, *excludes nitrogen from coal*, we may suppose that it does not

amount to a much greater proportion than that actually formed by Dr. Schafhaeutl, in Welsh anthracite. The average of two samples affording of nitrogen only 0.962, or, in round numbers, one per cent. This analysis confirms what observation has long shown, that this burning of our anthracites, produces abundant ammoniacal salts. The remark of J. E. T., therefore, that anthracite contains no nitrogen, requires modification. Had not analysis detected nitrogen, we might have attributed (as no doubt it is, in part,) the formation of ammonia in this case, to the passage of moist air over the ignited carbon; a well known and abundant source of the formation of this alkali. It is a question whether the spontaneous decay of coal ever evolves ammonia. It is on this point that the explanation of J. E. T. rests, so far as bituminous substances forms part of Daniel's manure. Spontaneous decay is a very different process from dry distillation in a closed vessel. It is quite probable that the bitumen acts less than the sulphur. This last acts by gradually forming sulphates, and probably your correspondent is right in attributing very little to its effects. We have then, sawdust, alkali and lime for the active agents. The effects of the new manure are due to other causes: 1st. To the evolution of carbonic acid gas. 2d. To the alkali forming soluble geine, with the woody fibre, whose decay is hastened by the presence both of that alkali and of lime. The sawdust, containing all the elements of manure, organic and inorganic. Dry sawdust exposed to air, decays—carbonic acid, water and ammonia result. While it loses, thus 3 parts in 100 of carbon, it loses 12 parts of oxygen and hydrogen, as water; or loses altogether 15 parts. If the air is excluded, as in the present case, and moisture is present, then the water is decomposed and a larger portion of carbonic acid is formed. The loss of weight is now from 18 to 25 per cent, and the resulting mass is geine or humus. This immediately combines with the alkali and abundance of soluble manure is formed. The small portion of fixed alkali here acts like ammonia in cow dung. The immediate effects of the "new manure" are due to the evolution of carbonic acid among the silicates of the soil. These are decomposed by it. Their alkali is lost, and acts on insoluble geine in the soil; the phosphates, combined with the silicates, are set free. This action of carbonic acid upon silicates, has been quite overlooked. The necessity of forming it, among the silicates, where plants are sprouting and growing, is of the first importance. The function of carbonic acid is here of the highest order in vegetable growth and culture. It is the high function of fermenting manure. It must never be lost sight of. No matter how rich a soil may be, in geine, it that has lost the power of spontaneously and readily producing carbonic acid, it is dead, barren—it must produce carbonic acid, not for the food of the plants, but to *decompose the silicates*. On this turns the theory of rotation of crops. I shall touch upon this hereafter. To the causes above referred, is to be attributed the effect of the new manure. I doubt not the same results would follow from alkali and sawdust only—the same results which follow from muck and alkali, a little quickened perhaps, by a more free production of carbonic acid. If so, we are taught an important and practical lesson. Saw dust, or fine woody fibre, is to be added to swamp muck and alkali. All this is to be learned by trial. Let it be tried.

In connection with this subject, this evolution of carbonic acid, I would suggest to J. E. T. whether his remark, that fat is useless among the offal of the slaughter house, may not lead to a waste of a very good manure.

Fat, &c., is useful in two ways: 1st. By exposure to air, it evolves much carbonic acid. 2d. During

this process, it gives up its glycerine. This last is an organic product, highly soluble in water. To this fact, "spent ley" owes no small part of its good effects. S. L. D.

Lowell, July, 1842.

Notice.

Professor Liebig has a new work in the press on Organic Chemistry and Physiology. It will be published simultaneously in this country under the care of Professor Webster, the able editor of Liebig's former work. The work has been translated by Professor Gregory, who expresses himself as follows in relation to it.

"In my opinion, this work will mark the commencement of a new era in physiology. In translating it, I have experienced the highest admiration of the profound sagacity which has enabled Liebig to erect so very beautiful a structure on the foundation of facts, which others had allowed to remain for so long utterly useless, and of the logical structure and extreme cogency of his arguments. There is hardly a point in physiology accessible to chemistry (I mean, of course, those on which experiments have been actually made) on which he has not, by the mere force of his intellect, thrown the brightest light. In short, we now feel that physiology has entered on the true path, and the results, before long, will, I prophesy, be altogether astonishing."

On the use of Salt for destroying Grubs.

We have much pleasure in submitting the subjoined communication to our readers. Its suggestions in regard to agricultural experiments are of the highest importance. Experience is the certain road to useful knowledge. Every farmer can afford to make experiments, if not on a large yet on a small scale; and experiments on a small scale may be equally conclusive and satisfactory as others. All that is wanted in these cases is exactness of observation in regard to all the circumstances under which the experiment is made its progress thought and its results. Every practical farmer is continually making experiments. His whole course of cultivation is to a degree, a course of experiments; here then let him carefully write its progress, its incidents and its results; and let him journalise them for his own benefit, and communicate them for the benefit of his neighbors.

The "Plough Boy" we have never seen. It is we believe the only agricultural publication of the State that we are not in possession of. We wish some friend would put us in the way of obtaining a copy; and we should certainly republish the communication referred to. Nor do we recollect Cartwright's communication on preventing the rust in wheat. To the concluding suggestion of our respected friend we must demur, as believing it wholly impracticable. At a convenient season we design to treat the whole subject of salt as a manure, a subject on which much has been written but little is determined. Eo.

MR. HENRY CULMAN:—In your June number is a valuable communication relative to the efficacy of salt in destroying the grub. By way of confirming this information would it not be well to republish a communication made by Major Smith of Albany, upon this subject to the *Plough Boy*, as long ago as 1821. You will find it in the 2nd vol. 98th page.—I am induced to make this suggestion in consequence of our mutual friend H. D. Grove remarking to me that he had used the quantity per acre recommended by your correspondent, without complete success, if with any success at all—which according to Mr. Smith is quite impossible unless the salt is dissolved. My experience confirms the truth of Mr. Smith's statements—I have long since called the attention of the Cultivator to it as one of the most important communications that have been made to the farmers.

Dr. Harris, in his report on the insects of Massachusetts, has made mention of the value of salt water in removing those aphides that prey upon the roots of

plants—which confirms as far as it goes, the statement of Mr. Smith. The English periodicals contain numerous communications relative to the value of salt in destroying slugs, (snails?) and worms.—Grub worms I presume is meant. They also state that to insure success the weather and the land must be damp. Mr. Field (Cultivator, vol. 4, p 183) killed grubs by using beet brine.

Any farmer who has a quantity of old brine and a watering can may easily prove the truth or falsehood of these positions when the grubs appear next year.—It is very desirable that intelligent farmers would on some scale or other, no matter how small, settle the question experimentally—and forward the result to some agricultural journal so that from the number and variety of the communications something like certainty may be derived. It is to be regretted that the attention of intelligent farmers is not sufficiently concentrated upon the various topics of agricultural inquiry that are continual recurring. From the want of concert among them many a valuable suggestion is lost. Here is a communication from a most respectable and accurate man that has slumbered for twenty years, which would have been of incalculable value to the farmers if ten of them had during that long period stated its truth and published their experiments. It is true that with the generality of farmers their experiments are rather the result of accident than design; at least this has been the case. But as there is now a spirit of liberal inquiry aroused in the farming mind, can it not be directed in a good degree to the same channel by the agency of the agricultural editor? Will it not do for you to urge your correspondents, for example to put a good deal of salt, at once, as well as common, in their communications for some time to come, and thus furnish abundant data for settling the value of salt to the farmer both as a manure and a verminuge.

Every year the wheat districts suffer to a greater or less extent from the ravages of rust, and yet it is rendered more than probable that the free use of salt as a manure prevents this terrible disaster. At all events the celebrated Dr. Cartwright ascertained that if one pint of salt be dissolved in eight pints of water and applied to rusted wheat at the rate of two hogheads to the acre, the rust entirely disappears in two or three days, leaving only a slight discoloration of the straw. Now will not the sowing of very fine salt upon rusted wheat when it is wet with dew or rain answer every purpose and save the farmer from heavy loss?

Yours most truly, J. B. NOTT.

Norman Vale, Guilderland, July 7, 1842.

Every thing connected with the great staple of Western New York is important, and therefore we subjoin the following communication published in the Maine Farmer of a late date. We do not feel authorized to decide upon its soundness, but submit it to the observing and experienced.

Advantages and Disadvantages of the Bald and Bearded varieties of Wheat.

Mr. HOLMES:—As the farmers of Maine are at some loss as to which is the most profitable to raise, the bearded or bald varieties of wheat, I have thought that it would be beneficial to state the advantages and disadvantages of both, according to my experience.

Advantages of Bald Wheat.—The flour is whiter, takes more pounds of flour to the bushel, as the hull is thinner and there is less bran, packs closer in the bundle, and takes less room in the stack or barn. The disadvantages are, the liability to lodge or to be thrown down by storms and rains, rusts or blaste easier, or more likely to be rusted and blasted, takes longer to grow, does not ripen so early in the season, and must be mixed thinner in the paste before baking. The bread rises sooner after baking.

The advantages of Bearded Wheat, especially the Payson Williams Black Sea, are, stiffer straw, not liable to be beat down by storms or to lodge on rich land, quick in its growth, ripens early, and will do to sow late, is seldom known to rust or blaste, and prob-

ably bears more heads to the acre, though that is doubtful. It need not be mixed so thin in the paste before baking. The disadvantages are, yellow flour, thicker hull and consequently more bran. Does not make as many pounds of flour to the bushel.

Let it be remembered that all bold wheat makes white flour, all bearded wheat yellow flour.

Winthrop, May, 1842.

E. W.

Seed Wheat.—Caution to Farmers.

The subjoined is a very important communication. Some years since, having taken great pains to get some celebrated wheat from a distinguished cultivator, we received a few bushels very much mixed with rye, oats, &c. We undertook to clean it by picking out with the hand all the "foul stuff." The undertaking was most tedious; and being obliged to leave home before it was finished, we left it in charge to a man in our employ. He being very impatient, and not destitute of that self-conceit of superior sagacity so common in such cases, immediately after we left, took the whole to the mill and passed it through the smut machine. The consequence was, its germinating power was destroyed, and with the exception of a very few straggling plants, we lost our seed and our labor; to say nothing about our temper.—Ed.

Mr. COLMAN.—Through the medium of your paper I wish to caution the farmers of Western New York, against sowing wheat threshed with a machine, for I believe it is one great reason, if not the only one, why we do not have wheat grow as thick now as it did before machines came in use. I came to that conclusion last fall, and threshed my seed with flail, and the result is, my wheat came up twice as thick as my neighbors, according to the quantity of seed sown per acre, threshed with machine, which was about one bushel and three fourths per acre, and it stands so yet. I further believe wheat should be sown as soon as the last week in August, for as far as my knowledge extends, wheat sown at that time has not failed to be of a good quality, when that sowed ten or twelve days later has been very much injured by the rust.

JO. WICKOFF.

Romulus, July, 1842.

For the New Geneva Farmer, Turnips without Cost.

In well manured ground, now occupied with corn and potatoes, where it is not intended to plough the ground before late in autumn, a crop of White Norfolk or other fast growing turnips, may be raised without detriment to the present crop, and without any cost excepting the seed and sowing, by scattering a small quantity between the rows the last time the cultivator or plough is passed between them. This latter operation every good farmer knows, should be done much later than many practise, stirring the soil and destroying the weeds often being a matter of great importance, so far at least as the corn crop is concerned, even when the plants have attained the height of two or three feet. The corn being cut up early in autumn, leaves the full occupancy of the ground to the turnips and they advance rapidly in growth. When sown among potatoes, they will in general have at least one month for growth after the potatoes are dug from the ground.

It is true that by this method heavy crops cannot be obtained; but that a considerable quantity is generally afforded and much more cheaply than they are otherwise obtained, has been sufficiently proved by the experience of the writer.

J.

Lime and Mode of Application, from Proceedings of Royal Agricultural Society in June last.

Mr. Raymond Barker communicated some observations on the use and abuse of lime as a dressing for land, by Mr. Wm. Henry Fisher, at 15 Conduit street, London. The author's great object is to impress upon farmers the importance of using quick lime, and not lime which once had been quick, but

by delay in use and exposure to the atmosphere has become effete, and has absorbed from the air the carbonic acid which it again changes to the carbonate of lime it was before burning. He considers that many thousands of pounds are annually thrown away by agriculturists from want of a proper knowledge of this simple fact; and he recommends them to use their lime in the fresh burnt state, by carting it direct from the kiln upon their land, spreading it in the lump, and in that state ploughing it in directly, the sooner it being got from the kiln into the land the better. The author concludes his communication with the following remarks:—"The lime will be found, if properly burnt, on a second ploughing, to be crumbled to pieces or powder, and on harrowing will be intimately mixed with the soil. From the heat evolved during the slacking of the lime underground, and its causticity, which diffuses itself by the agency of the moisture it meets with through the soil, it will be found to destroy, or at any rate to be extremely obnoxious to wireworms, slugs, grubs, and other enemies which the farmer has to contend with, and which are very frequently the cause of failure in his crops, as well as in rendering most vegetable matter in the soil soluble, and food for future crops. These are the properties that lime has in common with chalk; the latter, no doubt, is a very useful addition to many soils, but do not go to the great expense of buying or burning lime, and then allow it to be converted again into chalk, or carbonate of lime, before you plough it into your land. In some districts the limestone is burnt in large lumps, particularly where wood is employed as a fuel—in which case it should be broken to about the size of a small penny roll before it is ploughed in. In some cases it may be said, that, owing to the distance of procuring lime, enough cannot be brought at one time for a ploughing; all I can say is, plough it in as soon as possible. If the turnip-fly is generated in the lime, applied in the manner I have directed, would no doubt do much towards their extermination; and the same effect and result would hold good in respect to the black caterpillar. In conclusion, the good effects of applying lime in the manner recommended, I have myself experienced, and have received ample testimony to the like purport from extensive agriculturists, who, at my suggestion have adopted the plan."

Royal Agricultural Society.—Marling with Shale.

Charles Charnock, Esq., of Halfmead House, near Ferry Bridge, in Yorkshire, Eng., communicated to the Council the results of his application of Burnt Blue Shale, as a substitute for clay or marl on the billy and thin soil of his farm. Mr. Charnock stated that in the coal districts, a blue clay was brought up, and accumulated to rapidly near the mouth of the pits, as to become a great and inconvenient incumbrance to the owners; that this clay was similar to the "Blue Shale" of the West Riding of Yorkshire, and was frequently burnt, and when drilled along with crushed bones, was in this state found useful in promoting the growth of turnips; but as the whole of the heated mass required frequently to be turned over before it could be thoroughly burnt, the operation was found to be tedious and expensive.

Mr. Charnock having had some years' experience of the utility attending the application of the Blue Shale to the gravelly part of his own farm, was induced, from the success which had attended his trials of it, to select from the numerous experiments he had made on this point, one average experiment to be submitted to the consideration of the Society, and to show to its members that even an article as abundant and useless as this shale became of value if rightly applied to its proper purpose, and, as in this instance, to soils of a gravelly and sandy nature.

Mr. Charnock's experiment in question was tried upon a soil lying upon the magnesian limestone—a substratum proverbial for its natural poverty and inability to resist drought; and he enters into a detailed statement of all the particulars relating to his operations. The result of this experiment was found to be in favor of the system he had pursued; and that his barley crop gave an increase of 27 3/4 bushels, and his wheat crop 17 1/2 bushels, per acre, besides saving the expense of from 12 to 16 pounds of rape-dust on the crop.

Waterloo Woollen Factory.—Is now daily thronged with farmers and farmers wives, many of the latter encumbered with their nurslings; 4000 lbs. of wool, on the daily average in June, are here sold or exchanged for cloth—the long sales room is crowded with eager buyers; such another hum of voices and confusion of tongues, is not to be found outside a Jews Synagogue.

S. W.

TRANSACTIONS OF THE NEW YORK STATE AGRICULTURAL SOCIETY.

The Report of the Jefferson County Agricultural Society is exceedingly well drawn up. We give merely an analysis or abridgement of its contents.

The report commends the practice of manuring fallows for wheat. It would have been gratifying and instructive, had the committee informed us when and how this manure was applied; whether at the first ploughing or at the last; what manure is applied and in what condition; whether ploughed in or dragged in; and in what quantities.

The average yield of cheese to a cow, 309 pounds, by which we suppose is intended new milk cheese only, is respectable, but not more than that, in a country where the pasturage is so abundant. The yield of butter, 112 pounds to a cow, is much less than it should be. In Cheshire, Mass., 500 lbs. of new milk cheese and 25 lbs. of butter are not infrequently obtained to a cow, in dairies consisting of thirty and forty cows, and we have known, of butter, 180 lbs., 200 lbs., 212 lbs. obtained to a cow, where several cows have been kept. We speak in this case of native stock altogether; what might be done with the Improved Stock and with better keeping, remains to be seen.

Premiums appear to have been bestowed upon three farms, although ten farms are briefly referred to. The names of the successful competitors in these cases do not appear, and in only one case is the town referred to in which the farm is situated. This is a singular omission, for which undoubtedly the committee had their reasons, but do not give them. No 5 particularly, is represented by the committee as being "as fine a farm, in all respects, as the county affords. There are on it 750 rods cedar post and board fence and 350 rods staked with perpendicular stakes." Now it must be admitted that this is a very meagre account, and about as instructive as if the committee had told us of a farm in the moon of as many acres and with just as many rods of stone wall.

We like very much the suggestion of the committee to give a premium to the best farm in each town; and we mean no disrespect in remarking upon the deficiencies of their valuable report; but the object of agricultural premiums is not merely to stimulate agricultural skill, industry, and enterprise; but also, and chiefly, to obtain from another man's success such information of his mode of operation as may enable us to obtain similar results. From a farmer, who becomes the subject of a premium, we should have so extended an account of his whole farm management, operations and experiments, that his farm may serve as a pattern and guide for others. But where not only the farm management is not detailed, but even the names of the farmers and the places are not given, certainly the public are little benefited; and one of the best objects of giving premiums is entirely defeated.—Ed.

Jefferson County Agricultural Society.

Paid in premiums, \$385 00.

The viewing committee visited twelve towns of the county, and inspected twenty-two farms and eighteen dairies. It is the unanimous opinion of the committee, that the premium should hereafter be given for the best farm in each town.

Desirable Improvement.—We distinguish a most gratifying improvement throughout the county. The committee regret that less attention is paid to ornamenting the front yards of the new houses with shade trees and shrubbery, than they deserve. Attention paid to these interesting objects, is labor well applied.

Fallows Manned.—We observed a great deal of land sowing to wheat. We never saw fallows in finer condition. Among the gratifying improvements every where observable in our husbandry, the renewed attention now paid to manuring the fallows is very conspicuous. In the first settlement of the county, good crops

were raised without manure; but the generality of our lands demand it. Diligent attention paid to accumulating heaps of compost for our fallows, can alone ensure us a reasonable prospect of a profitable crop. Whether lime can not be used to as great advantage, as in some of the older States remains to be seen. To our knowledge the experiment has not, as yet, been clearly tried.

Apple Orchards.—We saw enough to convince us, that with proper attention, the common prejudice that apple trees will not flourish well north of the Black river is erroneous. We passed some as fine orchards in this section, as are to be found in any other parts of the country.

Fencing.—Great improvement has taken place in fencing. Some farms that we visited are almost wholly fenced with straight post and board fence, thus making a great saving of land, as well as a permanent and handsome barrier.

Public Roads.—We found the roads perfectly good; though much of this is owing doubtless to the dry season, yet in turnpiking and bridges there is a gradual improvement. In the town of Alexandria, the newest in the county, we found the roads fully equal to those in the oldest town.

Canada Thistle.—We saw less of that pest to our farms, the Canada thistle, than has heretofore been observed. Our good farmers have learned to exterminate them by thorough ploughing and mowing. It is the duty of the path-master to have these cut from the roads, but surely no good farmer would allow them to remain on roads passing through his farm, even should the overseer neglect his duty, which is manifestly the case in some places.

Size of Farms.—One great error in our farming, observed by us as well as others, is in having too large farms. Except for grazing, it is questionable whether a farm ought to exceed one hundred acres; and one half of this may be considered ample for a farmer who has not a family of boys to assist him. It is a fact often spoken of in the older portions of the State, that after the paternal farm has been divided among the children, as much is raised from the parts by increased attention to manuring and cropping, as was formerly raised from the whole. It is very certain that a small farm adjoining the village of Watertown, of about forty acres, is, by thorough culture and undivided attention to that small number of acres, made more profitable to its owner, Hart Massey, Esq., than some farms in the county of three times the size.

Silk Culture.—The raising of silk worms and the manufacture of silk, is, as we learn, in very successful operation in Carthage. The small children of the family can be employed in this occupation to great profit.

Cheese Dairies.—The twelve cheese dairies we visited milked in all three hundred and fifty-four cows. By adding to the gross amount already made one third for the remainder of the season, we find that each cow will have made 309 pounds of cheese. At six cents per pound this brings the earnings of each cow to eighteen dollars and fifty-four cents for the year.

Butter Dairies.—The six butter dairies offered to our inspection milked one hundred and eight cows; adding one third to the amount now made, they will average one hundred and twelve pounds each; this, at fourteen cents per pound, is equal to fifteen dollars and sixty cents; a difference in favor of the cheese dairies of two dollars and eighty-six cents each cow.

Premium Farms.—The farm to which the first premium is given, contains about one hundred acres of improved land. The present occupant has been on it thirty-three years; he originally took up but forty acres, and having paid for that, has been gradually adding to it. It is a grazing farm, and in a high state of cultivation, not a weed or a thistle to be seen upon it!!

There is on this farm, 550 rods of cedar posts and board fence.

The second premium has been given to a farm of 160 acres, 80 of which are improved. The owner has on it, 700 rods of handsome stone wall, nearly every rod of which was laid by himself. It has a fine orchard, and is in all respects in the most favorable condition.

The third premium is awarded to a farm in the town of Alexandria. This farm is an example of what can be accomplished in a few years of patient industry. It contains 200 acres, of which 150 are improved. It is mostly a grain farm, in a high state of cultivation, free of weeds and thistles, and has been cleared by the present occupant within the last nine years. There are on it 1000 rods of black-ash fence.

Onondaga Agricultural Society.

This is a highly valuable report, and may be read with advantage by every farmer. Mr. Gaylord's notion that by keeping the locust tree shaded he shall avoid the attack of the borer, remains to be proved. We should be glad to know on what facts or experience it rests. The most successful experiment, we have known, in expelling and keeping off the borer has been made by Allen G. Metcalf of Lenox, Massachusetts. He washed his locust trees as thoroughly as he could with spirits of turpentine mixed with water. His trees were much infested with the borer. After this they were not found, and when we saw the trees, which was some years after the application, they had not returned.

Mr. Gaylord's corn it appears was much injured by the wire worm. We have known one good farmer, who was accustomed, after ploughing green sward, to take a crop of oats, that he might avoid the wire worm, as his corn always suffered severely when it was made the first crop in such cases. Another experienced farmer recommends not ploughing until very late, so that there may be a considerable amount of young grass turned under, upon which the worms might feed, instead of feeding upon the corn.

We gave an account in a late paper of a skillful farmer, who was accustomed to mix salt with his manure, by which he, from long experience, was satisfied that his corn was saved from the attack of the worm. From this and some other facts known to us, it seems quite desirable that salt should in some way be tried for this object. It is important that it should not be applied in too large doses.—Remember Lot's wife, poor woman! —Ed.

Onondaga Agricultural Society.

The farm of Silas Gaylord is on the west bank of Skaneateles lake, and about four miles south of the village. This farm contains 145 acres, 25 of which are covered with wood. The 120 acres are all arable land, and suitably divided into fields, on which is pursued a course of crops. A large share of the western part of this farm was formerly so wet as to be unfit for tillage. This Mr. Gaylord has very properly reclaimed by underdraining, which is a very profitable operation on lands which are so moist as to be otherwise untillable. Twelve hundred rods of stone underdrain are already constructed on this farm. The buildings are well located and in good repair. The outbuildings are extensive and convenient, especially the barn, which is very large, with cellar, shed or stabling, under the whole of it. This is a great improvement, as it requires no additional roof, and furnishes a place where stock can be kept comfortable in the most inclement weather; a convenient cellar for the preservation of roots, and a place for preserving manure from the great waste attendant on exposing it to the storms of winter and spring.

The farming tools are in good order, under cover and ready for use. The fences mostly in good order, and

a large share made of posts and boards. The fields are generally in good order, and few weeds are allowed to perfect their seeds. All vacancies in the timber land are filled by transplanting locust trees, which are taken from a nursery on the farm. By thus keeping the locust tree shaded, Mr. Gaylord thinks he shall avoid the depredations of the borer. The stock on this farm consists of 33 neat cattle, all of which are full blood or grade Durham, 4 horses, 15 hogs, and 74 sheep, of the improved English varieties. The division of the farm the present year, with the quantity of crops is as follows:

Wheat,	18 acres,	400 bushels.
Barley,	10 do	300 do
Peas,	5 do	100 do
Oats,	5 do	200 do
Potatoes,	2 do	320 do
Corn,	3 acres,	much injured by wire worm.
Meadow,	30 acres,	60 tons.
Pasture,	45 do	

The farm of Mr. Gaylord exhibits the practical good sense and untiring industry of its owner, and is well worthy of a visit from those who are designing to raise stock, or erect the out buildings which are necessary on a stock farm.

Your committee were next called to view the farm of Fletcher Woodward, situated on the turnpike, five and a half miles west of Syracuse. This farm contains 236 acres, 225 of which are under improvement; all tillable, and in a high state of cultivation. This farm is naturally adapted to the raising of grain, and to this Mr. Woodward gives most attention. The course of crops which is produced is: 1st, corn or potatoes, on a clover ley, then oats or barley, which are followed by wheat, after one and sometimes two ploughings; then sows eight quarts of clover seed, two quarts of timothy seed, and three to four bushels of plaster per acre on the wheat, after one in the spring, and pastures one year after the wheat is harvested. Mr. Woodward sows from one and a fourth to two bushels of wheat per acre, according to the time of sowing; prefers sowing from 10th to 15th September. Never sows grass seed with any crop but wheat; general average of wheat crop per acre, from 20 to 27 bushels; has raised 48 bushels per acre on small pieces. Corn is invariably raised on green sward, with one ploughing, harrowed down smooth, and struck out both ways; rows north and south, 3 feet 4 inches east and west, 2 feet 8 inches apart. Plants early in May, with plenty of seed, coated with tar, and thins at hoeing to 4 stalks in hill; plasters as soon as up, and again after second hoeing; uses the cultivator, hoes 3 times, and makes very little hill.

Barley is generally sown on pasture land with one ploughing; general crop 30 to 58 bushels per acre; sows from 2 to 2 1-2 bushel per acre; oats are cultivated after corn; sows 2 1-2 to 3 bushels per acre; general crop 50 to 80 bushels per acre.

Mr. Woodward's method of cultivating potatoes is to draw at the time of threshing wheat, (with a pair of horses and rope,) the straw, and deposit it in large bunches on a clover ley, leaving a narrow strip all around the field, on which no straw is put. In the spring this narrow strip is ploughed and harrowed fine; then drops the seed once in two feet each way; covers about one inch deep, and keeps the surface as near level as possible. He then takes the straw adjoining this circle, around the field, and deposits it evenly on the ground already planted, to the depth of about 4 inches, when settled together. This leaves another strip for ploughing, which is treated in the same manner as the first, and so on, until the crop is ready to harvest, which is usually from 300 to 500 bushels per acre. This farm is divided into fields of the average size of 23 acres. The fence consists of 963 rods of posts and boards, 215 rods of full wall, and 180 rods of half wall, all in

good order. For the convenience of passing these fences, 33 gates are already hung, and the committee were informed by Mr. Woodward that he had contracted for 22 additional gates to be erected this fall. The quantity of produce raised on this farm the present season is as follows:

Wheat,	88 acres,	1760 bushels.
Corn,	20 do	1460 do
Oats,	33 do	1320 do. injured by drought.
Barley,	25 do	750 bushels.
Potatoes,	5 do	1500 do
Meadow,	10 do	20 tons.
Pasture,	47 do	

The stock kept on the farm consists of 12 horses, 28 neat cattle, 83 hogs, and 150 sheep.

Mr. Woodward has given a practical illustration of the fallacy of the idea which is so often advanced, that the farmer cannot afford to be nice in his farming operations, and that the profits will not pay for an outlay of extra capital in improving the soil and fence. One of the committee asked Mr. Woodward if he took an agricultural paper, to which he replied—"I do, and have for a number of years, and have found it of great use. And could I have had the Cultivator, with the present light upon the subject of farming, when I first commenced, (18 years since,) I think it would have been more than \$1000 benefit to me."

The farm of Mr. Woodward exhibits in a favorable manner the beneficial effects of what is denominated the new system of husbandry. The antiquated customs of farming which our forefathers followed, are not so dear to him as to cause him to shut his eyes to the improvements which modern agriculturists are annually making in the science of farming. He is not so fearful of being called a "book farmer" as to refuse to take and read the agricultural publications of the day. He is not so fearful of being denominated a theorist as to refuse to try the improvements which are recommended in those publications; and his farm shows the consequence; it being well fenced, well cultivated, very productive, and very clear from weeds, none of which are suffered to seed. In short, everything shows that the operations on this farm are directed by an enterprising, intelligent, practical farmer.

Your committee were next called to examine the farm of Hiram Church, situated in the town of De Witt, 2 1-2 miles northeasterly from Syracuse.

This farm contains 137 acres, about 100 of which are under improvement, and all suitable for tillage. It is divided by a good cedar fence into fields containing about, 10 or 12 acres each. The produce of this farm the present year is,

30 acres wheat,	673 bushels.
4 do corn,	200 do
6 do oats,	360 do
3 do peas,	75 do
1 acre potatoes,	150 bushels.
12 acres meadow,	24 tons hay.
22 do pasture.	
22 do summer fallow.	

Mr. Church prepares his ground for wheat mostly by summer fallowing, ploughing three times. His method of raising corn is much like that pursued by Mr. Woodward, except Mr. Church uses a small plough instead of a cultivator; consequently he makes some hill around the corn.

The stock kept on this farm consists of 9 neat cattle, 7 horses, 10 hogs, 60 sheep. Mr. Church makes liberal use of clover seed and plaster, and this practice your committee would earnestly recommend to every farmer.

The farm of Mr. Church is newly improved, compared with the farms of Mr. Gaylord and Mr. Woodward; but is naturally choice grain land; and we doubt not, with the industry and enterprise which Mr. Church exhibits, it will soon show such a degree of

neatness, and amount of produce as few, if any, farms can now exhibit.

Royal White, of Onondaga, called the attention of the committee to a field of wheat, containing four acres and fifty-two rods, which Mr. White informed us yielded 167 bushels of wheat. Method of cultivation—broke up about the middle of June, about ten inches deep, and immediately harrowed. Ploughed and harrowed again the fore part of August. Ploughed and harrowed the third time the 10th of September, and immediately sowed with seven bushels of Canada flint and white flint wheat. Three-fourths of an acre of this piece of land was sowed with peas, and was ploughed but twice.

Col. W. Abbott, of Otisco, presented a fine sample of spring wheat, which he originated by a series of experiments from the bald flint, which is a well known variety of winter wheat. For an account of his experiments we would refer to page 133, of volume 9 of the old Genesee Farmer.

The committee recommend that the first premium on farms be given to Fletcher Woodward. The second to Silas Gaylord, and the third to Hiram Church.

It was unquestionably the intention of the Legislature, when they passed the act for the promotion of agriculture, and devoted a part of the funds of the State to that object, that the money so distributed, should be applied in the way best calculated to benefit the agriculture of the State. To do this, it was not deemed enough that agricultural fairs should be held, and the money expended in premiums, but provision was expressly made for giving the greatest publicity to the modes of agriculture adopted, or the different processes pursued, by the successful applicants for premiums. No premium was to be awarded, until the statements referred to, had been made, as without the knowledge that could be gained in this way, one half of the advantages to agriculture, proposed by the State in its appropriation of funds, would be wholly lost. All such statements, reports, vouchers, &c., made to the several county societies, were to be transmitted to the Executive Committee of the State Agricultural Society, whose duty it would be to select, compare, condense, and arrange into a report to the Secretary of State, such papers, statements, &c., as should be deemed best adapted to subserve the cause of agriculture in the State. The Executive Committee regret to say, that in too many instances, these requisitions of the law appear to have been entirely overlooked; and that where partial returns have been attempted, they have in most cases, been very meagre and unsatisfactory, barely an approximation to the returns contemplated by the provisions of the act."

Sowing Plaster.—Many farmers suppose that plaster should only be sown after spring vegetation has advanced; this is evidently a mistake, as plaster must be dissolved before its manuring properties are developed; rain, frost, and even snow, are necessary to effect this result; hence some have observed that their plaster did no good in a dry season of the first year. S. W.

What shall Farmers do, when Doctors disagree?—It has been said that plaster thrown among horse litter will seize upon the ammonia of the urine and preserve it with the manure. I believe this is agreeable to Leibig's theory; but other chemists say that the lime in the plaster will certainly expel the ammonia. S. W.

Fall Ploughing.—Some farmers condemn fall ploughing, because it does not succeed on an easy-riable soil. Is this any reason why a stiff clay should not be improved by it? A clay garden with long manure ploughed under in the fall, will save much tedious labor in the spring, besides vegetation will be much earlier. S. W.



ROCHESTER, AUGUST, 1842.

AGRICULTURAL EXCURSION.

By the invitation of several respected friends in Monroe and Livingston County, the editor has had the pleasure of passing a few days with some of the excellent farmers of the Genesee Valley. He gratefully acknowledges their kindness and hospitality. He could not have had a more delightful excursion. He is never more at home than among the farmers, and truly enviable is the condition of the residents of this charming country. He has taken the liberty of adding some hasty and superficial observations made in this joint in reference to the agricultural condition of this region, which he trusts will give no offence, and which will be extended when he has more room. They are given not from any conceit of their value—very far from this; but in the hope that they will call attention to the subjects adverted to, and elicit communications from those whose intelligence and experience would greatly instruct the agricultural community.

The Genesee Valley.

The river Genesee rises among the high lands of Pennsylvania in the neighborhood of the Susquehanna. Winding its way among the mountains, it enters New York by the Southern side of Allegany county, passes into Livingston county, which it divides longitudinally nearly in the centre, and after traversing the whole breadth of Monroe county pours its rich tribute into Lake Ontario. At its ordinary level it presents an average breadth of only a few rods. Its course is remarkable for its windings and doublings. It has some rapids; and it has at least six considerable falls, all within New York, of remarkable picturesque quality; and at high water, of singular beauty and grandeur. Its rapid torrents, its brilliant cascades, its sweeping and in some cases its terrific floods, and its lofty and precipitous walls, rising for a considerable length of line to a height of 400 feet and presenting in some instances, perpendicular cliffs of 600 feet, are objects of attraction to men of taste, the geologist, and the curious traveller. In these respects they are surpassed in the Northern United States only by the world's wonder, the giant of the waters, Niagara.

The river, after successive leaps and rapids soon after leaving Allegany county, at Mount Morris becomes a quiet and in low water a sluggish stream, bordering on each side meadows and alluvions of large extent and eminent fertility. At the village of Mount Morris the river may be said to enter the Genesee Valley. Here the flats begin, forming an extensive region of alluvial meadow, surrounded by hills of medium elevation and of easy and gradual ascent, presenting an expanse of an average width of more than two miles, as nearly as the eye would enable me to judge. A large portion of this land is cleared and under cultivation. It was to a degree cleared when the whites first came into the country; and was a favorite resort of the Indians, whose judgment directed them to select the most fertile as an instinctive taste led them to spots the most picturesque and beautiful. A considerable portion is still occupied by a deep and dense forest of extraordinary magnificence: The parts which are cleared, are adorned, or perhaps it might be properly said, left with excellent taste, as they were adorned in their original condition, with here

and there a single tree of beautiful proportions, sometimes a bolt of considerable length, and at other times a clump equally as graceful in their shade as they are exquisite in their form and foliage. The largest tree that has ever come under my observation, is an oak on the meadow of Mr. Wadsworth in Genesee, being full eight feet in diameter, standing out in its majesty as the contemporary of other generations and the mute historian of departed centuries. Under its shade the imagination naturally reverted to days gone by and to the changes which have transpired during its long reign. The wild children of the forest, who were accustomed to gather under its spreading branches to celebrate their rude festivities or hold their councils of war, have all departed; and the quiet and rejoicing herds, marking the progress of civilization and humanity, repose securely around it. The council fires are extinguished; the deadly arrow no longer rustles among its boughs; and the warwhoop and shrieks of vengeance, which once filled those valleys with terror, have given place to the songs of harvest-home and the gentle and peaceful undulations of the village bell. Everywhere among these meadows, clad in a verdure of surpassing depth and richness, and waving with their golden harvests, cultivation has triumphed over the rudeness of nature, and art and skill and taste display their brilliant trophies.

It was once asked what was the use of rivers, and the reply was, to feed canals with. Acting upon this assumption, the State has penetrated the whole of the Genesee Valley, from Rochester to Dansville, with a canal, and availed themselves of the waters of the Genesee river to fill its banks. The line of passenger boats on this avenue are of the best description. The canal from Rochester passes for some distance through an unbroken forest of extraordinary growth until presently it emerges into a highly fertile and cultivated country, and for its whole distance to Mount Morris, as far as we pursued it, intersected an agricultural country as rich as the eye could rest upon, and dotted all over with flourishing villages and the abodes of rural wealth and independence. Nothing seems wanting to render the picture perfectly enchanting but an expanse of water; and if nature had seen fit to spread out in this valley a lake like that of Canandaigua or Seneca, the imagination would have had no difficulty in recalling all the beauties and splendors of the primeval state.

THE SOIL.—The soil of the country varies somewhat in different places, but is throughout strongly aluminous and calcareous. On the meadows or flats it is alluvial and full of vegetable mould, the washings and gradual deposits of the hills, and so clayey as to be used with advantage for bricks. In some cases on the uplands, it is so strongly clayey as to be cold and heavy, and unfavorable to any grain crop and difficult and discouraging in the cultivation. The best soils are undoubtedly those of a gravelly nature; with clay enough to render them tenacious; and full at the same time of small and finely comminuted stones, which are supposed to be limestone, though as well as I could learn no exact chemical analysis has been made in any case. This kind of soil prevails in Wheatland, Caledonia, York and other places, and is eminently productive. On Mr. Wadsworth's farm in Genesee, I found a marly substance composed of lime and clay, which readily effervesced with acids, indicating the presence of carbonic acid. In the hilly portions of Mount Morris, the crops were later than in the valley region, but promised most abundantly. Here, it was stated to me, no lime is found. These lands, however, have been much more recently brought under cultivation than those which I have before adverted to. The best crop of wheat which I found in my whole journey, though by no means the most extensive, that which promised best in respect

to its evenness, cleanness and fulness, was in this part of the country on the farm of James Conklin of Mount Morris. It was of the red chaff variety. None of these soils as yet, however, exhibit any diminution of their product, though in some cases the cropping is severe and often without manure.

CROPS.—The crops cultivated in the country are almost wholly wheat, oats, and grass. Wheat every where predominates, and is the article on which the farmers mainly depend for their cash returns. On the alluvial meadows herds-grass, red top and various natural grasses prevail; on other lands, subjected oftener to the plough, clover is mainly cultivated.

Of all the crops, wheat claims the principal attention of the farmer. The average crop, as rated almost unanimously by the intelligent farmers whom I consulted, does not exceed twenty bushels, which is certainly very much below what the land is capable of producing. Where the error or deficiency lies, if error or deficiency exist, is not readily perceived; but if possible it is most desirable that it should be ascertained. The quantity per acre of seed sown is about 14 or 15 bushels, and the general practice is to wash in brine, and lime the seed before sowing. The time of sowing is from the first to the 15th September. One or two farmers spoke of the advantage of putting in their seed the last part of August.

Much larger crops are sometimes obtained, and I saw several fields of large extent, which might safely be put down at thirty bushels per acre. Mr. Sheffer near Scottsville, one of the earliest settlers in this country and the owner of a magnificent farm originally of 700 acres, in Monroe county and intersected by the canal, in the early settlement of the country obtained from forty acres of land in a single field, 2500 bushels of wheat, which was at the rate of 62½ bushels per acre. Within a few years, Mr. Hall, in the centre of Wheatland, on 12 contiguous acres of land, obtained 648 bushels, or 54 bushels per acre. A neighbor of his, Mr. Blacknir, obtained in one case 68 bushels per acre.

Not having had the pleasure of an introduction to either of these farmers, I could not ascertain what particular circumstances of soil or culture enabled them to produce crops so extraordinary. No such results are matter of accident, or, as it is often termed, luck, and must in a great degree depend on some peculiar superiority in the condition, cultivation, or management of the soil. The best cultivation in England and Scotland produces 50 and 60 bushels of wheat to the acre. Now there is no circumstance connected with our climate, soil or condition, which should prevent the wheat farmers in the Genesee valley from producing as much as can be grown by any farmer on any land in the world; and the difference between 20 and 50 and 60 bs. in the produce of a field, certainly deserves all consideration. The crops of Wm. Garbut of Wheatland, whose farm for its condition and crops, strongly attracted my attention, usually average twenty-five bushels per acre. There certainly is no reason why our friends Garbut or Harmon, two of the best farmers in the country, should allow themselves to be out done by any farmers in any country.

Mr. Harmon of Wheatland, has taken great pains in the cultivation of wheat, and made experiments with several kinds of wheat, having cultivated them separately with a view to ascertain their comparative times of ripening, their hardness, their proof against freedom from injury either by insect, rust or mildew. He is still pursuing these experiments with great care. At the Monroe Agricultural show he exhibited twelve different kinds in grain and in sheaf, with a view to attract the attention of the farmers to this important subject. He has now growing several of the bald and bearded varieties, among which are

the Talavera, the Provence, the Virginia May, the Red Chaff, the Hutchinson and the Crute, besides others; and of the comparative result he has kindly promised a full account.

He desires me likewise to say, that if farmers will apply to him for seed, they may rely upon that which is clean and genuine. I can have no doubt that this warranty may be entirely relied upon.

Oats are here a remarkable crop. I have never seen heavier crops any where. The oat usually cultivated is the common branching oat, and weighs 32 pounds per bushel and yields ordinarily forty and upwards of bushels per acre. I saw one field of the Tartarian or Horse Mane oat, so called from the panicles hanging all on one side. This I think was at the Shaker settlement in Groveland, and in their cultivation usually yielded from 40 to 60 bushels per acre. The largest growth of the common oat I saw on the rich meadows of Mr. Cuyler in Leicester; they were nearly five feet high throughout the field. Their yield, though it must be matter of conjecture, would probably not be less than 50 to 80 bushels per acre. But by far the best field of oats which came under my notice, was on the well managed farm of R. Harmon in Wheatland. It was the Scotch potato oat, weighing ordinarily 44 lbs. per bushel, and must yield a very large crop. This oat is said to degenerate after the first year's cultivation. It would be well to inquire what occasions this degeneracy.

The amount of seed sowed is $\frac{1}{2}$ bushels per acre. Mr. Harmon informed me that in one instance he obtained forty bushels from 15 qts. sown. I found some farmers who were accustomed to sow three bushels per acre. The black oat is sometimes cultivated, but I know no advantage which it has over any other.

Rye appears to be scarcely cultivated here. I saw in my journey only one field. Where as much wheat can be obtained as rye from the same extent of land and with no greater expense of cultivation, the superior value of the wheat product leaves no ground for hesitation as to which to choose.

BARLEY.—Of Barley I saw many fields and some very heavy. The average yield sited to me was 25 bushels. Wm. Garbut of Wheatland, gives me as the average product of his fields, forty bushels. He sows the double in preference to the four rowed barley, and considers one bushel of barley as food for any stock, equivalent to a bushel of corn. Some extensive fields on the Genesee flats must yield more than forty bushels to the acre. The breweries in the country formerly created a large demand for barley, but the progress of temperance has greatly abated this demand.

PEAS.—Peas are considerably cultivated, and under successful management yield forty bushels per acre. This, however, is an extraordinary yield. They are mainly cultivated for stock, the grain being quite equal to corn for sheep, and the haulm, when well saved, is as nutritious and as much relished as any long feed which can be given them. A pea called the grass pea I found growing in two instances, in the one for the use of Bees, for which purpose it was sown broadcast and much esteemed; in the other, as matter of experiment, in order to ascertain its yield and its value. It did not promise much.

INDIAN CORN.—This may be considered as a rare crop in the Genesee Valley, and the cultivation of it inferior. Mr. Wadsworth gave it as his opinion that the average yield was not over 25 bushels per acre; but Mr. Bond, an experienced and intelligent farmer, stated that with good cultivation fifty and seventy-five bushels per acre might be had, and he had himself known instances of 116 bushels per acre. Indian corn is evidently not a favorite, and is fairly distanced by its great competitor, wheat. There may, in the condition of the market and various local circumstan-

ces, be good reason for this; but when the value of the grain and the value of an acre of well cured corn fodder are both considered, when sheep, or horses, or horned cattle are kept, I believe that the corn crop deserves much more attention than it receives.

I was surprised at the statement of Mr. Brooks of Brooksgrove in Mount Morris, that corn to use his own expression will not grow there upon newly cleared land even when it has been burnt over; and that the land must be sometime under cultivation before a crop of corn can be produced. This is contrary to almost universal experience in other places, where newly cleared and burnt land is considered highly favorable to corn. I am at a loss to account for this, but I cannot defer to so high authority. Large crops of wheat are obtained here. The growth is principally oak on the high lands, with some sprinkling of hickory; on the lower and moist lands we find much rock maple and elm.

POTATOES are not largely cultivated. They are valuable for sheep; but the present prices of pork and beef give no encouragement to their cultivation for swine or cattle. That potatoes are much more valuable for sheep and cattle than ruta baga, I have no doubt; but as many bushels are not usually obtained on the same extent of land; and the care of preserving and the cost of seed, and the labor of harvesting favor strongly the cultivation of ruta baga in preference.

ESCULENT VEGETABLES.—In so hasty an excursion through the country and so superficial a view as was in my power, it would be presumptuous in me to speak with confidence on any subject connected with the husbandry of the country, or think to afford much knowledge in relation to it. I can only say that I saw but a single instance of the cultivation of esculent vegetables for stock. This was on the farm of Mr. Garbut in Wheatland, who had several acres in carrots, beets and mangel wurtzel. I must leave it to some other occasion to discuss the pros and cons in relation to this matter.

OF FLAX, I saw only one field and that at the Shaker village in Groveland. It appeared well. The habits of this industrious people, who, as a general rule and as far as it can be done, produce and manufacture all their own clothing, lend them to the cultivation of flax, which is in a great measure abandoned by other farmers. This crop I am persuaded might be cultivated to advantage by many farmers. Where 300 lbs of lint and fourteen bushels of seed can be obtained to an acre, and this is not uncommon under good cultivation, the crop will yield an ample compensation for its expense. (To be Continued.)

Crops and Markets.

Throughout the whole country the crops of wheat and grass are represented as most abundant and fine. There are some small complaints of rust in some places, as indeed there always will be, but they are of little moment; and a finer season for harvesting never was known. It has been almost unexampled.

Indian corn, likewise, which at first seemed likely to fail, is making rapid advances, and promises a good crop. The same with potatoes, barley, and all other products.

The crops of wheat in Ohio and Michigan are likewise as good as ever known. The price of wheat in Rochester can hardly be considered as settled or even fixed, as no new wheat has as yet come into the market. Some millers have expressed the opinion that it will begin at a dollar but soon go down to 75 cents.

The Beef and Pork markets at New York and Boston remain without material change. Probably a much smaller quantity of pork will be made this season than usual, and the prices for pork or for live hogs are not likely to recede from their present position.

Wools of a fine grade command only 25 cents; and in many cases only half of this is paid in cash, and the rest in cloth. The free importation of South American wool costing less than 8 cents, and the raising of wool on the Western Prairies, for which there are large preparations, must keep prices down, tariff or no tariff.

In the midst of the greatest plenty that ever fell to the lot of any country, we are crying our eyes out for distress; and the National cow, with a swimming pail of milk under her, seems determined to kick it all over.

Prospect of prices of western agricultural products.

—As over-production and a reduction of the currency have reduced the price of most manufactured commodities, and steam is now employed on the prairies to drive the plough, it would be very strange if agricultural products (pork excepted) did not also decline in price. The cash received for a bushel of wheat, will now purchase in this village, 10 lbs. of good Rio coffee, or 20 lbs. of inferior N. O. Sugar. A pail of butter will exchange for a bundle of domestic calico and muslin, as large in bulk as the butter itself.—Ought farmers to expect this unequal exchange of commodities to continue so much in their favor always? I think not.

Flour is now selling in New York at \$6 the barrel to export to England; if Great Britain has good crops this year, and there is no failure of crop on the continent of Europe, nothing can prevent very low prices for flour in New York in one year from this time, but a failure of our own wheat crop, which is improbable, or a partial failure of our summer crops, which, from present appearances, is very possible. In either case farmers must expect and prepare themselves for small profits, as high prices from failure of crops is a calamity, which compels even the farmer to eat dear food. It is common for farmers to complain of the low price of wool, yet wool is much lower in Europe than in the United States; the English manufacturer gets fine wool from the continent for 25 cts. a pound, while our manufacturers pay our own farmers 40 cts for wool of like grade. The fact is, what is a low price to an extravagant, expensive man or family, is a high price to those whose wants are fewer, who practice a better industry, economy, and self-denial! In this reduction of profits and the consequent means of expenditure, who does not see a precious result, even to the farmer? Ask a thriving, wealthy American lord of the soil what are his troubles; if he is honest, he will tell you it is the effeminate habits and expensive wants of his children. With uninterrupted pecuniary success, where would these troubles end?

Waterloo, 8th June, 1842.

S. W.

Protective Tariff.—A farmer who writes in the May No. of the Northern Light, says that a high tariff would "make us farmers work harder to obtain the same amount of enjoyment," and "protect our industry much in the same way that it would be protected by compelling us to resume the old fashioned wooden mould board, and throw aside the cast iron plough." But the other side of the question is easily maintained in the same capital monthly—it has two sides. S. W.

Culture of Potatoes.—If they are grown in a warm dry country, as between Syracuse and Buffalo, put no stable manure in the hill; but if on cold Hemlock soil, where it rains or snows at least once a week, they may be covered in the hill with warm manure without any danger of burning up the tubers. Providence is truly kind to such countries, in giving them grass and potatoes, such as would make a western villager's cow laugh, and his own mouth water. If they can't grow good seed corn, neither can they even in their wet grounds, raise manna enough to furnish a single case of fever and ague. S. W.

On Ploughing in Green Sward for Wheat,-- Green Vegetable Manure, and the Land made to enrich itself.

MR. COLMAN--The objections of your correspondent "Turningseed," page 106, be it observed, are entirely theoretical, the result of mere opinion. Notice Agriola's remarks, page 6, for they really appear to be based upon experimental fact. Which are we to choose? I for my part have a guess, that our friend A will bring his harrow to work pretty smartly in this case, which will satisfactorily settle the question, it is need such be not already done. Probably favors his observations, inasmuch as the mellowness of the soil is at all times favorable to its fertility. The burning influence of the sun upon land deprived of its natural vegetable coating, is peculiarly impoverishing, and it seems probable that the longer this unnatural exposure is kept up, and its surface varied by repeated and rough ploughings, the greater injury it sustains by summer heats, and the more need will there be for the mellowing ingredients of manure and other dressings. If the land be rolled and dressed to receive the seed after a single ploughing, it is clear that the exposure of the whole body of the soil to the influence of the sun's rays has not been so complete as in the former instance of repeated ploughing; nothing more has been done than is requisite to destroy the former vegetation and prepare for the intended seed, which soon comes up and protects itself and the land from the parching heat by throwing out the blade that protects the root. Now it will be observed with the slightest attention, that of the three methods proposed, page 6, that by the first a good crop of clover was sacrificed to begin with, and the subsequent ploughings served to perfect its destruction, together with such weeds as might have been present, and yet with all this, plaster must be freely used; in the other two plans as before alluded to, the land was not exposed more than was requisite to destroy former vegetation.

I might add more, but leave the subject to the discussion of able individuals, and dismiss it with earnest good wishes for the success of both parties.

Yours respectfully, J. W.

Rochester, July 5, 1842.

The suggestion of our correspondent that land suffers by exposure to the sun without any vegetable covering, is very questionable and by no means an established philosophical truth. The soil undoubtedly gathers much of its fertility from exposure to heat, light and air. It suffers, however, when the vegetable matter in it is brought to the surface, and these being decayed, may be said to be evaporated instead of being retained as so much humus in the soil.

Since the remarks in our last in relation to this subject, we have visited the farm of Mr. Cornell in Henrietta, Monroe Co., who has been in the habit, for the last five years, of ploughing only once for wheat and turning in a clover ley. His success in this practice is complete, and there is probably no farmer in Western New York, whose crops yield a higher average. By this process fallows are entirely abolished; and his land is always under a crop.

We shall give in this paper an account of Mr. Keeley's experiment, to which we referred in our last, and some remarks made at a late meeting of the Royal Agricultural Society on the same subject, where, by a curious coincidence, it is advised to sow mustard with a view to its being ploughed in, in order to enrich the ground.--Ed.

On the Cultivation of Rye.--John Keeley's Statement.

To the Trustees of the Essex Agricultural Society:

GENTLEMEN--Having for some years past been more than commonly successful in raising large crops of winter rye by a process of cultivation which I believe is entirely new; I have been induced by the sug-

gestion of some gentlemen whose judgment I very much respect, to submit for your consideration a statement of the mode of culture with the produce. And that the success of the experiment this season, may not appear to be altogether accidental, it will perhaps be well to communicate the result of the process for the three or four previous years.

The land on which the experiment has been conducted is situated on the Merrimack, about a mile and a half east of Haverhill bridge; and came into possession of my father in 1827. The soil is a sand, approaching to loam as it recedes from the river. Perhaps the term *plain land* (by which it usually passes) will better convey an idea of the quality of the soil. It is altogether too light for grass. The crops we find most profitable to cultivate on it are winter rye, Indian corn, potatoes, and to some extent turnips. Oats might probably be raised to advantage, were it not that the land is completely filled with the weed commonly called charlock, which renders it entirely unfit for any spring crop, excepting such as can be hoed. The crops of rye, on the neighboring soil of the same nature, vary from seven or eight, to twelve or thirteen bushels per acre, according to the cultivation and their approximation to the river. We usually raise on the land from thirteen to thirty bushels of Indian corn per acre. Potatoes we very good in quality, but the quantity is quite small; not sufficient to be profitable, were it not that the land is very easily cultivated.

In the summer of 1827, we sowed three bushels of winter rye near the river, on about two acres of land, which produced twenty-eight bushels.

In 1828, we sowed four bushels on four acres of land running the whole extent of the plain from the river. This piece was sowed in the spring without; but they were completely smothered with charlock, and about the middle of June, the whole crop was destroyed. To prevent the second crop from coming, at the middle of August, a second crop of charlock having covered the land, it was ploughed very carefully, in order completely to bury the charlock; and then suffered to remain until the 15th of September, when we began sowing the rye in the following manner. A strip of land about twelve yards wide was ploughed very evenly to prevent deep gutters between the furrows, and the seed immediately sown upon the furrow and harrowed in. Then another strip of the same width, and so on until the whole was finished. We found the oat stubble and charlock entirely rotted, and the land appeared as if it had been well manured, though none had been applied to this part, since it had been in our possession. The rye sprung very thick and vigorously, having evidently derived great benefit from being sown and sprouted before the moisture supplied by the decaying vegetable matter in the soil had evaporated to any considerable extent. This crop produced 133 bushels.

In 1829, the charlock was suffered to grow on the land appropriated to rye, until it had attained its growth and was in full blossom. The land was then ploughed very carefully and the charlock completely covered in. In a short time a second crop appeared more vigorous than the first. This also was allowed to attain its growth, and then ploughed in as before. A third crop soon appeared, which of course was destroyed when the land was again ploughed for sowing about the middle of September. This piece of land was a parallel strip running from the river, and containing two acres. Two bushels of rye were sowed. The crop presented a remarkably promising appearance, and yielded seventy-four and a half bushels.

In 1830, the land appropriated to rye included nearly all the lighter parts of the soil, and owing to a pressure of business was not attended to as we could have wished. It was ploughed in the early part of the summer. But having intended to destroy the weeds as substituted for the second ploughing, the usual light which affected all the grain in this part of the country, led us to anticipate a small crop. It yielded however fifteen bushels to the acre.

The land on which the crop of rye was raised the present season, had for the three or four previous years been planted with Indian corn. And owing to the extent of our tillage land, we have not been able to apply more than four or five loads of manure to the acre this season. The charlock was suffered to attain its growth as usual; and on the 1st and 19th of June it was carefully ploughed in. The second crop was ploughed in on the 6th and 7th of August. On the 14th and 15th of September it was sowed in the usual manner, namely: a small strip of land was ploughed and the seed sown immediately upon the furrow and then harrowed in. Then another strip of land was ploughed, and so on until the whole was completed.

One bushel per acre was sowed as usual. The seed was originally obtained from a farmer in this vicinity, and I suppose is similar to that which is generally used. We have never prepared our seed in any manner, but have directed our attention solely to the preparation of the land; and to this we attribute our success. Owing to the unusual severity of the winter, the crop was considerably winter killed; but recovered very soon in the spring, excepting in the midfurrows. There, as the land lies very level, the water settled and so completely destroyed the rye that they continued bare the whole season. This would of course cause some diminution in the crop; perhaps a bushel or two. The rye was reaped at the usual season, and, as the weather was favorable, immediately put into the barn. The land contained one acre and thirteen rods, and yielded *forty-five bushels and three pecks. A remarkably fine sample.*

In entering a claim for your premium, I would ask your attention particularly to the process of cultivation. This, I believe, entirely new; and capable of general application.

Sowing the seed immediately after the plough, we could not have very advantageous the crop, the soil being then moist, causes the seed to spring immediately, and gives a forwardness and vigor to the plants which they ever after retain.

The process of ploughing in three crops of weeds before the seed is sown very much enriches the soil. It would be altogether unnecessary to attempt to refute the notion, that by such a process nothing more is applied to the soil, than was before derived from it. If one could not discover by the light which Chemistry has shed upon the subject of agriculture, sufficient reasons for the contrary conclusion, observation, one would think, would be sufficient to convince any intelligent man of the fact.

And here I would suggest that I do not consider the experiment as we have conducted it, quite complete. To render it more so, in the first place, in ploughing in the weeds, I would not turn a furrow after the dew had evaporated. I have no doubt but that a large portion of that fertilizing quality in the soil, which (during the summer months) is continually exhaled from the earth, is by the dew brought again within our reach, and it would be wise to avail ourselves of the opportunity of again burying it in the soil. And in the second place, I would by all means use a heavy roller after each ploughing. It would fill all the cavities left by the plough, and by pressing the soil more closely to the weeds, at once hasten their decomposition and very much retard the evaporation from the soil.

But the land is not only very much enriched by this process. There is, I conceive, no method by which it can be so effectually cleaned. Three times during the season, a fresh surface is presented to the atmosphere, and each time, as the decaying vegetable matter increases in the soil, so is the exciting cause augmented to make a more vigorous effort. We have in this manner gone over nearly all our land which is infested with charlock, and the diminution of the weeds is quite sufficient to warrant the expectation, that in a few years it may be comparatively eradicated.

Very respectfully,

JOHN KEELEY.

Haverhill, Sept 22, 1832.

The subjoined statement was made at a meeting of the Royal Agricultural Society in England on first of June last. It is not a little remarkable that this experiment of Mr. Cawston so strongly confirms the results of Mr. Keeley's experience. These cases are among the most striking on record of the value of, ploughing in green manure; and show that the means of enriching the soil at a trifling expense are within the reach of every farmer.

Vegetable Manure.

MR. W. W. Cawston, of Worlington, near Mildenhall, in Suffolk, transmitted the following result of his experience in the ploughing in of green crops--"I am not aware that the attention of the agricultural world has been drawn to the following process, which I have had many opportunities of seeing tried with the most decided and beneficial effects in this neighborhood. When trefoil has been seeded, clover or other hays failed, peas or tares grown, or a clean summer fallow made for wheat, in the middle of August, or thereabout, skeleton-plough, or plough very flat, and sow a peck of white mustard seed (*sinapis alba*) per acre; harrow in with light drag, clean off any grass or rubbish; and as soon as it is well up, top dress with a light coat of farm-yard dung (say 6 or 8 loads of 32 bushels). In 6 or 8 weeks a very heavy, fibrous, lux-

erant crop will be ready to be ploughed in for wheat as soon as the flowers are beginning to open. This operation may be easily accomplished when the plants are three or 4 feet high, by attaching a chain to the head and handle of the plough, which will completely draw it all into the furrow, and the following land surface neatly. A large supply of vegetable manure is thus cheaply obtained, and the seed costs now about 5s. 6d. per peck; while the mustard, if wanted, is excellent feed for ewes at tuppings time. If any further directions should be deemed useful, I shall at all times be most happy to supply any information I may possess."

We give with the greatest pleasure the subjoined communication, quoted from the New England Farmer of the 23d of March, first, because of its intrinsic value and interest; and next, because of the source from which it comes, Morrill Allen of Pembroke, Mass., one of the most practical, intelligent, and successful farmers in the country. We take the liberty to jog his elbow as ours is every day jogged, to remind him that the time is short, that what we do must do quickly; and that he is bound on every principle of duty and humanity to let the world have the benefit of his rich experience before he leaves it, especially as he is now taken out of the yoke. It may not seem very coming for us to catechise an old friend in this way; but we hope he will remember that five hundred miles makes no difference in the affections; the chain of friendship disdains all distance and reaches alike on pole to pole and from earth to Heaven. From the latter place, however, agricultural communications will be so direct as here, excepting in the form of dew and rain and air and ten thousand other blessed influences, but not in the way of pen and ink. This is confined to earth; do therefore let us hear from him while here, and we will listen as reverently and as attentively as if, as we have often done, we were guests at his hospitable board, or warming our feet (we cannot say smoking the pipe of friendship, that we never do but figuratively) at his kitchen fire.—*Ed.*

Leather Shavings for Manure.

MR. ERROR.—One of your correspondents inquires what is the value of a cord of leather shavings destitute of oil. We should suppose it would be difficult to find a cord of those shavings, in any manufactory, tire void of oil. There may, however, be operations exclusively in soft leather, which would produce them. We can speak only of the efficiency of the shavings in the shops of the shoemaker and currier. The use of those shavings is no doubt a powerful ingredient, but cannot be powerful enough to produce more than small portion of the effects witnessed. The gelatine skins would be generally admitted to be a very efficient manure; this quality may seem lost in the conversion of skins into leather, and there may be so firm combination of gelatine with tannin, as to defy the power of the chemist to extract from the leather anything strongly resembling the original qualities of the skin. The laboratory of nature, however, will often prove results which that of the chemist cannot. The supposed insolubility of leather shavings should not arise as an objection against the use, more than the supposition of decay against the application to land the hair and hoofs of animals, feathers and wool, which by general consent rank among the most powerful of manures.

We did not sit down to write a dissertation, but to give a narration of facts. Forty years ago, we purchased a small farm of a shoemaker, who had cast the shavings from his shop by the roadside or in the corner of his lot. Our first object was to clear away those filthy heaps. We carried them into the fields, believing if the leather could do no good, the vegetable substances would, which time had incorporated with.

Every field on which these heaps were spread, came remarkably productive;—so much so as to excite the admiration of neighbors. And something great have been ascribed to ingenuity in cultivation, which was due rather to the energy of old leather, used early, and in some degree accidental success, when we had neither read nor thought much on subjects connected with agriculture, induced us to be very sparing of scraps of old leather, we have been in the habit of cutting up old shoes and boots and spreading them on fields, and always think there is an amply remuneration for the labor bestowed. It will be

perceived there has been no course of experiment, which could qualify us to give definite answers to all the questions of "Inquirer." We think, however, that leather shavings are a good dressing for almost any description of soil; that they will assist in the growth of nearly every class of plants, perhaps more than any other material, except manure, and that their influence. We think three cords sufficient for one dressing of an acre, and believe the ultimate results of such a dressing would be greater than a dressing of six cords of the richest barn manure.

M. ALLEN.

Pembroke, March, 1842.

From the Mark Lane Express

Beneficial Effects of Bran as Manure for Turnips.

Str.—A letter appeared in the "Farmer's Magazine" of last year, giving the analysis of bran (the husk of wheat) and recommending the farmers to try it as a substitute for bones and other manures; and when tried as an experiment in competition with other manures, that the result of such experiment should be reported through some of the journals for the benefit of his brother agriculturist. With this request I am willing to comply. After losing two crops of Swedes successively in a field that had been drilled with ashes, I noticed the letters on this subject, and determined on drilling twenty-five strikes per acre of pollard, (the finer portion of bran) with the turnip seed over one-half of the field; the result proved that when the men were put in to hoe the turnips, they found the field had been sown at twice, and at an interval of two weeks; so great was the difference in the early growth—a most desirable point, as it assists their getting out of the range of the fly; this marked and sensible difference was always apparent throughout their growth, and at the maturity of the crop. There was as nearly as could be estimated an increased produce of *one-third more in weight of turnips per acre*, which must have arisen wholly from the pollard, as in all other respects the field and its treatment were alike.

The experiment has been to my mind so conclusive and satisfactory, that I intend drilling some quantity this year, and shall also try it with other crops besides turnips where the land is not in high condition. I can easily carry back to the farmers when delivering on it their respective millers, therefore without any cost or expense of transit; it is now selling at about 44. 10s. per ton, which is cheap for the benefit received when compared with the cost of bones, about 100. or 120. per ton, which makes it the more desirable. I would not recommend so much as six cwt. being used to an acre, but any quantity from six cwt. to five cwt. per acre, which would be at a cost of manure of about 11. 2s. 6d. per acre for an increase of *one-third more in produce*. Should others follow, as I have done, the recommendation given in the letters before alluded to, it would only be fulfilling the duty we owe one another to report the result, more especially if it should prove favorable as in the above instance.

I remain, your obedient servant,

WILLIAM MONK.

Midhurst, Sussex, April 14.

Garden Seeds.—Why don't seedsmen mark the year on their papers of seed, in order that the retailer may not impose old seed on the customers? Nothing is so provoking, particularly in a backward season like this, as, after waiting three weeks, to find no boots or onions out of ground. If the doctrine that "honesty is the best policy," will apply to one trade more than another, it is to that of a seedsmen—many of my neighbors who are not pinching of a 6d. now raise their own seed to avoid being cheated. Onion seed wants much soaking.

S. W.

Onondaga Salt.—The salt inspector at Saline has turned the tables upon the Albany Cultivator, for saying that "large quantities of lime were used in the adulteration of salt." Had the Cultivator said a little lime was used to decolor the red oxide of iron which colored the salt, he would have misled the inspector to the counter.

S. W.

Indian Corn.—At the moment when the temperance reform is doing away with the use of corn as the basis of alcoholic drinks, man has discovered the invaluable secret of turning the stalk into sugar, at a far greater profit to the agriculturist, if report is true, than can be realized from the ripened grain. S. W.

Asparagus Bed.

To J. S. who inquires what is the best mode of making and cultivating an Asparagus Bed, we answer that the whole affair, which was once hidden in mystery or rather involved a very complicated process, is now as simple as the simplest operation in husbandry.

Now your seeds in a nursery bed in drills and keep them clean of weeds the first year. The next year prepare your bed by trenching the ground fourteen to eighteen inches deep, always keeping the top soil up permost; or, if the bed is to be a large one, by trench ploughing, that is by passing twice in the same furrow with a plough, the second time with a plough without a mould board, or a subsoil plough; and manure the ground as highly as possible. Alter it is well prepared, make trenches with a spade or plough about eight inches deep and two feet apart; place your plants of one year's growth in these trenches; put in upon the plants two or three inches of good well rotted or composted manure and cover them fully with dirt. Get the finest and largest kinds of roots for planting. Keep the beds entirely clean from weeds. They may be cut the third year from the seed; and in cutting the plants, cut them obliquely about an inch below the surface. Cover the bed, if convenient, annually, in the fall with stable manure two or three inches thick; in the spring dig it with a dung fork about six inches deep, and rake the bed clean. These directions will almost insure success. If you desire early asparagus, secure a warm and sheltered spot. Some persons recommend, as asparagus is a maritime plant, the application of salt to the bed. A small amount mixed with the manure or scattered upon the bed would probably be beneficial. Asparagus well cooked, is one of the earliest and best of vegetables.

Manufacture of Paper.

Mr. Dierrey, a paper manufacturer of Ghent, has discovered that the refuse ends of asparagus make excellent paper, at half the expense of paper from rags; and that a still greater economy is obtained by mixing the pulp of asparagus with that of the beetroot.—*Eng. paper.*

Instructions against Damage to Standing Crops by Hail Storms.

In France, and some other countries of the continent, companies for the Insurance of Agriculturists from loss through the destruction of standing crops by hail storms have long been established, and have proved of great utility. In England, happily, our rising harvests are not so frequently exposed to injury from such causes, but, nevertheless, it is the part of prudence to guard against even improbable danger, when the cost is trifling. Men do not insure their houses from fire because they expect a visitation from the devouring element, but simply as a measure of wise prevention against a possible casualty.—*New Farmer's Journal.*

Feeding Cattle on Carrots.

To the Editor of the Doncaster Chronicle.

Carlton Hall, Feb. 9, 1842.

Sir.—Noticing a question in your last week's Chronicle, on Feeding Cattle on Carrots, being a means of bringing on the Ophthalmia, I beg to say, we have been in the practice of feeding cattle with carrots very freely, more particularly milch cows, and have never had anything of that disease amongst them, generally being very healthy, and I certainly consider them very healthy food for cattle and horses. Whenever they are unwell I generally order them a few carrots.

I am, sir, your obedient servant,

W. BRADLEY,

Steward to R. Rumbden, Esq.

N. B. I wish to further observe, I have never found anything to produce so sweet milk and butter as carrots.

Crater in the Sun.

Something extraordinary is at this moment passing in the sun; a sort of crater is perceived in it, which emits clouds of smoke that spread over a portion of its surface like an enormous moveable spot.—*Brussels paper.*

Wood's Plough.

With the general aim of the submission remarks we entirely concur; and we are in the same situation as to a knowledge of the grounds on which the decision of the Court rested as the writer is. An entirely different impression from what he seems to have in this matter has been given to us; as we learnt from one of the counsel engaged in the cause, that it was decided on its actual merits, and on the ground, which the Jury at least supposed to have been made out, that Wood was not the original inventor of the improvement on which his patent depended. We should with extreme reluctance do his memory the slightest injustice; and should be very glad if some of our correspondents would set us right in the case.—*Ed.*

For the New Genesee Farmer

The late decision of the Supreme Court at Cambridge, or rather the reports of that decision may induce many to regard the inventor of Wood's Plough in a different light from what he justly merits. Not being present nor having seen a full report of the trial, I cannot judge so well as some others, but I understand the patent was chiefly set aside on the ground of legal technicalities, and not because Wood was not in reality the inventor. So far as he is in real equity entitled to the thanks of his country for the great benefit he has conferred upon it, cannot be affected by testimony of hasty observers, given entirely on memory of thirty years standing, which there is every reason to believe is founded in mistake, or by the fact that he delayed one year in getting a patent. No one denies that it was by his perseverance and talent that the cast iron plough was introduced into general use, and that this, together with the great improvement he made in it, has been the means of effecting a greater revolution in the agriculture of the United States than all the improvements in other agricultural implements and machines for the last twenty years put together. At the time he obtained his patent, no one thought of denying his right to it; but instead of this, his opponents endeavored to show that his plough was of no value. But as soon as he had triumphed over this opposition, and its real worth could be no longer doubted, his fellow-citizens commenced depriving him of the advantages he had thus obtained with so much labor and expense, with a very few exceptions, and the rest of his life was one ineffectual struggle to maintain what he supposed the law of his country had really given him.

The history of American Inventors, almost without exception, affords but a melancholy picture. Robert Fulton brought successfully into use a machine which has indeed conferred wonderful advantages upon the country and the world; yet he was opposed on every hand, and attempts were by no means wanting to deprive him of the honor of the invention, by showing the prior claims of others—but who doubts to whom the right belongs? Eli Whitney, by the construction of the cotton gin, conferred wealth on the Southern States to the amount of millions on millions; yet his life was a constant succession of vexations and disappointments in maintaining the validity of his patent; and so great was the opposition he had to encounter, and so little relief could he get from courts of law, that on one occasion he found it almost impossible to prove that his machine had ever been used in the state, while one could at that moment be heard within a short distance of the court house door. Yet it is doubtful, considering the constant and multifarious uses of the plough, if even the steamboat and cotton gin together, have conferred nearly the real benefit on the country, which the cast iron plough has done.

These remarks are not made from any selfish motives, as the writer is in no wise interested in the matter however remotely, but merely from a desire to

have justice done to the memory of a man who, instead of abuse, deserves the lasting thanks of all his countrymen.

A CITIZEN.

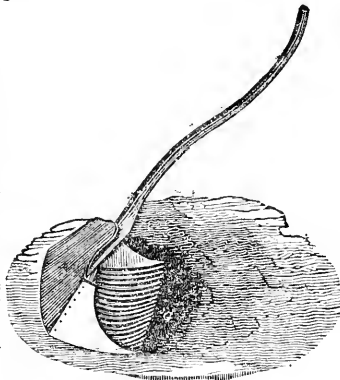
Cranberry Rake.

(Extract from a letter.)

"In your March number article, 'Cranberries' is mentioned a Rake by which a man can gather 50 or a 100 bushels of Cranberries per day. Such a rake would be of great value here, and I hope you will procure a drawing or description of it, that will enable us to make it."

J. M. L.

The Cranberry Rake which he inquires after, is a very simple instrument, made in a form of which we give a view.



It has curved teeth about fourteen inches in length made thin and set so closely together that the berries will not escape through them, and sides with a board about the thickness of a shingle or $\frac{1}{4}$ of an inch. The teeth are made of hickory. We give the dimensions from mere sight and not measurement. They are for sale at the excellent and extensive Agricultural Ware House and Seed Store of Messrs. Jos. Breck & Co., Boston. The price cannot be much, but we do not know what it is.

On Ploughing and Fallowing for Wheat.

DEAR SIR:—I perceive that the subject of summer fallow is again attracting among our farmers, serious attention, and well it may—for the loss of the use of wheat land for the half of the time is a serious drawback upon the farmers' profits—and that is not his only loss in consequence—the sun shining upon the naked surface of the land, during the hot summer months seriously injures it—and a continued use of the practice, would after a few years entirely ruin it. But fortunately nature ever mindful of the improvidence of man—sends forth upon the surface various vegetable productions, which serve as a carpet for the protection of the soil—even weeds do some good for that purpose.

Summer fallows and the loss of the land in consequence, and a remedy therefor, has for a long time attracted my attention and observation, and some practical operations have materially assisted me in the investigations.

Of all the operations of the farmer, ploughing is first in importance, and unless it is performed in the best possible manner, no very large crop need be expected; and the inquiry is abroad, cannot a good crop of wheat be obtained by once ploughing the ground, and that too after the crop has been taken off, either by hay or pasture. I think it can be done, provided it is properly managed. But this is certain, that if a farmer undertakes the course with a common plough, one span of horses or one yoke of oxen, and it is turned up rather shallow, as that strength of team necessarily

must do—with the greater part of the furrows set up edgewise, instead of being laid flat and his furrows so narrow, that no animal can walk straight forward in one without reeling out, sometimes on one side and then on the other, the plough following the cattle, sometimes in the right place, but oftener in the wrong, to the great discomfort of the ploughman as well as his team—that no crop of wheat can be expected with such management—the wheat will be choked under that kind of ploughing with very foul stuff, and the little wheat you get will not pay for the labor expended—and with such ploughing as we see frequently about the country, it is indeed a wonder that a crop of wheat is ever obtained even after three such ploughings.

No ploughman with the best of ploughs can make good work on grassy land unless there is sufficient width of furrow for the animal to walk in it steadily and with ease to himself.

But the grand question is, what must be done to insure a good crop after hay or pasture with but one ploughing? And on smooth land as most of the land now is, by repeated fallowing? To accomplish so desirable an object, the first thing necessary, is to obtain a plough of sufficient capacity to turn a furrow at least ten inches deep and fifteen inches wide, and turn it flat over, if twelve inches deep and eighteen inches wide so much the better—and team strong enough to draw it that will give an abundance of earth above the seed to be pulverised, and be prepared for a large crop of wheat.

A gnaw wheel to the plough is not only convenient but useful in such ploughing—the extra expense attending it, over that of common and narrow furrows is not so great as would appear at the first look, to cost as much at two furrows as you otherwise would at three furrows, will be found nearly to make up the difference in the expense of the two modes.

I cannot hardly tell why; but the first time the ground is managed in this way, a good crop is generally obtained, but not a very large one—whether it is owing to its not receiving a proper degree of pulverization the new parts of the seed not being sufficiently divided, I cannot say, although it must be rich enough; from what most people may have observed in making excavations. But the second time the operation is gone through with, and ever after if rightly managed, a large and heavy crop may be expected, with but a light expense in preparing the ground—for less strength of team will do the ploughing from what it took the first time.

I am fully of opinion that the land to be kept up good and not allowed to deteriorate and to be the most profitable to the farmer in a long run, ought not to be put into wheat oftener than once in three years—be thickly seeded with grass seed the next spring after sowing, a fine lot of after growth will probably be obtained in the fall after the wheat is off—the following year seeded principally with clover, with a small proportion of other grasses, and well plastered, an abundance of hay and pasture may be obtained; the next year the best of hay may be cut from it, or pastured if preferred—and the same season again ploughed and sown with a prospect of a first-rate crop—and if manure is liberally made and saved on the farm and applied to the bare crops, regularly to each part of the farm until each part of the farm obtain its share of the manure, the cultivator will find his farm in high order—and it will be his own fault if his pockets are not well supplied. One-third of a good wheat farm managed in this way, may be sown to wheat every year, and more stock kept upon it, than can be kept on any exclusive grazing farm that can be found in this country. I am respectfully sir,

Yours &c.

THOMAS TUFTS.

Le Roy, July 9, 1842.

Two the following letters ought to have appeared in the June number of the Farmer, but did not reach us seasonably. We hope they will attract the attention which they deserve; and should be very happy to hear from the writers of them as often as they find it convenient to favor us. Our friend W. B. will assuredly give the desired information respecting Tomato Figs.

Various Inquiries.—Stearine from Lard and Oil from Corn Meal.

Ma, COLMAN—It is with pleasure I acknowledge the great satisfaction as well as instruction I receive from reading your invaluable paper. Your April No. is particularly gratifying, and is calculated to fill the mind with a deep interest, particularly the notice you have taken of the Report of the Commissioner of Patents, Mr. Ellsworth. But I could wish that some of your correspondents would make themselves responsible by signing their names to their communications. Much more confidence, I think, would be placed by your readers in communications thus sustained, and the editor would be troubled with none but such, as the authors at least considered worth printing. A plain, simple statement of all the facts relating to the subject, is what is wanted, and if that is fortified by a responsible name, so much the better. No words (unless explained) should be made use of but such are to be found in common school dictionaries, for our farmers are not all brought up at the feet of Gamaliel.

In the last No. of your paper, is a communication signed "W. B." headed "Tomato Figs," describing their valuable and luscious qualities, and stating them to be within the reach of almost every man, and stating also, that in their preparation the medicinal qualities of the fruit were concentrated. Very well, so far, so good. But why stop here? Why not tell us how to prepare the "Tomato Figs"? He would then have done us a real service, and for one, if on trial I had found he had told us the truth, I would have hailed him as a benefactor. But I hope he will take up the subject again, and tell the whole story, and, by way of setting a good example, put his name to it.

I mention these things, not for the purpose of carrying or fadling fault, but to show that we farmers want facts more than speculation. We want truth, the whole truth, and if possible, nothing but the truth upon subjects communicated to us. An imperfect or erroneous statement of facts, sometimes injures the circulation of an Agricultural paper more than if the space occupied by it had been left blank.

Stearine from Fixed Oils, or Oils obtained from the seeds of Plants.

"The chemical nature of soap has of late years been elucidated by the labors of M. Chevreul. This chemist has found that fixed oils of fats are not pure proximate principles, but consist of two substances, one of which is solid at common temperatures, while the other is fluid. To the former he has applied the name of Stearine (suet) and to the latter Oleine (oil). Stearine is the chief ingredient of suet, butter and lard, and is the cause of their solidity, whereas oils contain a greater proportional quantity of oleine, and are consequently fluid. These principles may be separated from one another by exposing fixed oil to a low temperature and pressing it when congealed, between folds of bibulous (absorbing) paper. The stearine is thus obtained in a separate form, and by pressing the bibulous paper under water an oily matter is produced which is oleine in a state of purity."—Turner's Elements of Chemistry, 4th American Edition, from 3d London Edition, Philadelphia, 1832, p. 485.

Query.—Is or is not this process the same with that practiced in Alton, Ill., for extracting Stearine from the Oil of the Castor Bean, of which candles is made?

Again, Stearine from Lard.

"The method of preparing stearine and oleine from the vegetable oils has been already described

"(page 485) and the same process which originated with M. Bencnot, is also applicable to hog's lard. This process by which M. Chevreul obtains these principles, is by treating hog's lard in successive portions of hot alcohol. The spirit in cooling deposits the stearine in the form of white crystalline needles, which are brittle and have the aspect of wax, fuse readily when heated, and are insoluble in water. The alcoholic solution, when evaporated, leaves an oily fluid which is oleine."—*ibid.*, p. 544.

Here are two methods of procuring Stearine from Lard, of which, according to Mr. Ellsworth's report, candles are made worth 25 or 30 cents per pound, and one by which the same substance is obtained from vegetable oils for the same purpose. Whether either of them is the best that can be devised, remains to be seen. I hope we shall hear more on the subject.

But the subject in Mr. E.'s report, or so much of it as you have noticed in your paper, appears to me to be the most extraordinary, and if the results of Mr. Webb's experiments and the deductions drawn from them by Mr. Ellsworth are not deceptive, will undoubtedly prove of great importance to the people of the Northern and Western parts of the United States.

Mr. E. does not give us particulars, but says "a minute account of these experiments can be furnished if desired." I hope you will desire it, and also publish it. Let us have facts; there is still immense room for facts in the science, yes, science of Agriculture. We have not yet learned even its first rudiments.

Oil from Corn Meal.

I am informed that Oil from Corn Meal is obtained by a mercantile firm in this state to a very considerable extent. I am told they are largely in the distilling business, and purchase large quantities of corn and obtain the oil from the meal while in a state of fermentation, by skimming. The meal is afterwards distilled, by which operation, as my informant said, the oil they saved was clear grain above that of other distillers. I presume this is the company to which Mr. E. refers in his report, as wishing for the privilege of supplying the light houses on the Lakes with oil.

Our fruit trees are now in full blossom, and the earliness of the season keeps the owners in constant fear that a frost may come and disappoint their best hopes. The man who can devise some cheap method, within the reach of common farmers, whereby orchards could be protected from early frosts, would deserve well of his country. It is a subject which I hope your correspondents will take into consideration.

Yours &c.

J. CROCKER.

Wooster, Ohio, 1842.

Mr. COLMAN—In your May number of the Genesee Farmer I discovered an article headed "Sugar from Indian Corn and Stearine from Lard." On reading the article I was much disappointed in not receiving any information on the method of obtaining Stearine from Lard. For the past two months I have devoted some time and pains to the investigation of the best method of obtaining stearic, margaric and oleic acids, and stearine and oleine from lard and tallow. The method which I found to be the best for obtaining the above acids from lard and tallow, is this: boil the fat in water for four or five hours, with a sufficient quantity of lime to form an earthy soap. During this process, the elements of the fat are so arranged as to form the acids, which combine with the alkaline earth and form with it their respective salts. These salts or earthy soap is decomposed in a large quantity of water by sulphuric acid, the acids being thus liberated, rise to the top of the water, which, when cold, is to be taken off, shaved fine, and then subjected to strong pressure, when the oleic acid will run off in a substance resembling oil, and leaves the stearic and margaric acids in the press, a substance

very much resembling spermaceti, which, when made into candles, I found to be disposed to melt and run down; this, however, might be owing to its not being sufficiently pressed, as the press which I had was not very good.

If the process which you referred to in your last number is any thing like the foregoing, it is the last-mentioned acids that are obtained by it and not the stearine and oleine, as you there stated. The stearine and oleine are obtained by a different process. I have tried several experiments for the purpose of obtaining them, but as yet am not satisfied with the results. From what investigation I have made on the subject, I think I can soon satisfy myself with a process for obtaining them.

My object in writing to you is to obtain information on the subject. If you have a pamphlet on the subject you can spare, I wish you would send me one. If not, be so good as to write me those things that are practical.

Yours &c.

JOHN McLEAN.

Jackson, Michigan, 1842.

P. S. The process which I have given you in part in this letter, was patented in England in the year 1823.

J. McL.

We have sent the pamphlet of the National Agricultural Society to J. McL., and hope it has been received.

Cattle Shows, Fairs, and Ploughing Matches.

We subjoin a notice of the times of holding the several Agricultural Fairs, which come within our knowledge, within the district where our paper principally circulates, and shall keep it in until the times arrive. We shall be obliged to the Secretaries of the different Agricultural Societies in New York, Ohio, New England and Canada, if they will give us (post paid) the notices of their respective fairs.

New York State Fair, Albany,	Sept. 28 and 29.
Monroe County " Rochester,	Oct. 13 and 14.
Ontario " " Canandaigua,	Oct. 12 and 13.
Genesee " " Batavia,	Oct. 20 and 21.
Wayne " " Palmyra,	Sept. 5 and 6.
Livingston " " Genesee,	Oct. 4 and 5.
Oneida " " Rome,	Oct. 11 and 12.
Seneca " " Waterloo,	Oct. 20 and 21.
Tompkins " " Ithaca,	Oct. 6 and 7.
Onondaga " " Syracuse,	Oct. 5 and 6.
Jefferson " " Watertown,	Sept. 15.
Cayuga " " Auburn,	Oct. 12 and 13.
Qawego " " Oswego,	Oct. 5.

CANADA.

Durham, Bowmanville, Oct. 18.

Northumberland, Grifon, Oct. 12th.

Over-Production.—It would seem, that whatever can be produced by the steam engine power-loom and other improvements in machinery, has been generally, and in some articles of manufacture, sadly overdone in Europe and the United States; but this only adds to the farmer's comfort and wealth, as whatever depends solely on the hands, the plough, or the team, is not depressed *pro rata* in price and demand. When I see a farmer's wife exchanging a pail of butter, a basket of eggs, and a badly skimmed cheese, for calico and muslin enough to clothe all her children, while her husband stands by complaining of hard times, and contending that the dealer shall add thread and tape gratis, I am ready to exclaim with the Mussulman, "God is just: he gives to the rich man only one belly."

EXTRAORDINARY.—Three hundred large Hogs, brought from Kentucky by way of New Orleans, were offered for sale last Monday at Eyrington, Mass. They remained unsold. What next?

New Wheat is selling at 50 cents per bushel in Cincinnati.

From the Mark Lane Express for February.

Comparative Condition of the English and French Laborers.

To the Editor of the Mark Lane Express:

Sir—As at this moment all Englishmen are occupied with anticipated alterations in the corn laws, the relative modes of existence of the British and foreign laborer are often compared. I am aware that no man understands better than yourself the comforts or the wants of the farm servant in England; but as, during your sojourn and travel on the continent, I think you did not visit the West of France, give me leave to point out the situation of a day laborer in that country (say Department de la Mayenne). He earns twenty-two sous a day, 11d., (nearly), his ordinary food consists of black bread made of buck wheat, and a soup composed of salt and water, in which a few cabbage leaves have been boiled with a little grease—of this he eats three times a day; on Friday a certain quantity of buck wheat flour is boiled into a kind of posie and eaten, seasoned with salt. On Sunday, sometimes, he has a little bacon, but fresh meat (excepting a bit of liver or the inside of a sheep) he does not eat, since he makes wheaten bread. This general beverage is water, sometimes, when at a good house, he gets a little clear water, of the most pleasant description. A woman earns four sous a day, and her food which is soup such as I have before described, and four milk eaten with black bread. The man's dress in summer is a coarse linen jacket, trousers, and shirt; the hemp with which they are made has been grown in his garden, spun by his wife, and woven by a neighboring weaver; that used for the outer garment is dyed blue, and the shirt is left unbleached; he wears no stockings, a red or grey woolen night-cap covers his head. In winter the same, only substituting homespun wool for hemp, and a wisep of straw in the boots to keep his feet warm; three pairs (of these last) per annum cost eight sous a pair, keep him well shod. He possesses a hat, pair of shoes, socks, and a neckcloth, but these he only wears on Sundays and fete days. His dwelling is stone built, a ground floor, the window place is iron-barred with a strong inside shutter, and totally unglazed; the door is divided in two, the upper half and the shutter are generally left open for light; a bed or two in the corners, on wooden frames, and the floor is of earth.

This is not an exaggerated statement, but one drawn from real life. My only wish is that when the comforts of the foreign laborer are vaunted, the real state of the case may be known by those interested in the welfare of our own men, but whose pursuits or occupations have not permitted them to make personal observation. There is a noble emulation now existing in England for the improvement of agriculture, and it is not a compliment when I say that you have lent a powerful aid to its progress. But England could feed her people, and have to spare, I have no doubt; but to accomplish that great good, her millions of acres of yet un reclaimed wastes must be given up to spade husbandry, her pastures must be ploughed, and her cattle be stall-fed. Forgive my trespassing so long on your time.

Yours, &c., C. S.

POLAND.

BY MAJOR TOCHMAN.

Money is very scarce in all parts of Poland, the laboring class is in a wretched condition, and uncleanliness is to be seen even in the magnificent palaces built by their fathers. Many a Pole, who possesses thousands of acres of land, and who has thousands of bushels of wheat in his granaries, finds himself often under difficulty to pay taxes and arbitrary contributions. Consequently every thing that the laborer and the soil produce is very cheap—wheat the foreign article of the last being obliged to pay heavy duties, to maintain their non-commercial policy.

In the last two or three centuries before the dismemberment of Poland, copper money was almost unknown in Poland—silver and gold were in circulation—the people scarcely knew any other money than dollars and ducats, (a dollar was of the same value as the American; a ducat is a gold piece worth \$2.50); now a Polish florin (*zloty polski*) which is equal to one shilling of the State of New York, is divided into thirty very small pieces of copper, called "gorze," and for one such piece of copper, that is to say, for the thirtieth of a shilling, they have a loaf of bread sufficient for the breakfast, dinner, and supper of an American gentleman. The price of wheat is from 18 to 25 cents a bushel; rye, barley, and oats, sell at two thirds or a half of the price of wheat. In some parts of Poland, incorporated with Russia, those articles

may be got at a much lower price; whilst for coffee and sugar they must pay from 18 to 25 cents a pound, and for tea from 75 cents to \$3.

The consequence is, that the foreign articles, even of the first necessity, as the above are used by a very few families, in proportion to the population of the country; scarcely one person in a hundred is rich enough to use coffee and tea in Poland, since it has been deemed. An owner of two or three hundred acres of well cultivated land, seldom makes use of any article which does not grow on his soil. As to the laboring class, they never see any. The produce of the soil feeds and clothes them.

A common laborer gets in Poland from 6 to 124 cents per day; a mechanic seldom more than 25 cents; a female servant, in the country, has from 37 to 75 cents per month; a male servant from 50 cents to \$1 per month. In the cities, the wages of servants are about one fourth higher. The clothing of the laboring class of both sexes, is comfortable, but very poor, made of linen and woolen cloth, and furs of the country. The whole dress of a country female per annum costs from 3 to \$6; the dress of a laboring man from 1 to \$2, including shoes and bonnet. A pair of shoes used by a laboring female sells from 15 to 37 cents; and a pair of boots of a laboring man, from 37½ to 75 cents. As to the clothing of a lady, this costs nearly as much as in the United States; the cotton and silk stuffs, the ribbons and other articles necessary to make ladies' dresses, being almost of the same price throughout Poland as here. It is the same with regard to the dress of a gentleman,—only that the ladies' shoes and the gentlemen's boots are cheaper in Poland: such shoes as we pay here \$1.25 for, are selling in Poland for from 25 to 37½ cents; for such boots as cost here 7 or \$3, they pay from 2 to \$2. But to get boots for \$2, they must sell from 12 to 15 bushels of wheat, and the dress of a lady, worth only \$20, will cost them from 80 to 100 bushels of it. A farmer, who has 2,000 bushels of wheat for sale, can buy a silver watch for himself, but not one for his wife; while had he, before the dismemberment of Poland, sold 2,000 bushels of wheat, neither he or his lady and half a dozen of daughters would look at gold watches, not set with diamonds, or at least, with rubies.

The cattle, flocks, and herds, are also very cheap. A milk-cow sells at from 2.50 to \$4; an ox for slaughter from 10 to \$20. A horse, such as we pay here \$70 for, is worth in some parts of Poland about \$25; in the parts of the country incorporated with Russia, such a horse is worth only from 7 to \$12. A common sheep sells from 13 cents to one dollar. These called "merino sheep," introduced from Spain, are sold from 20 to \$100.

Wind Power Machine.

MR. HENRY COLMAN—I have this day received the enclosed letter from Captain Glover, giving me a description of his Wind Mill; but as he observes in his postscript, "but little insight can be had from the description." Yet I am persuaded that the view of the model for one minute by any mechanical genius, would impress its importance on the mind over all other forms for Wind Power.

I am respectfully, yours &c.

O. WHITE.

Brookline, June 25, 1842.

Roxbury, Mass., June 24, 1842.

I now will describe, as well as I can, my Wind Pover. It is adapted to be placed on the roof of a building, consequently occupies no room wanted for other purposes; it consists of 4 arms, to which is attached the wings, composed of thin boards, cross lined with the same, and fastened together with rivets or nails, and is hung to the arms with staple hinges about 3 by ½, and is supported by a spring, of which there are several sorts. The one I have adopted is somewhat like that of the main spring of a watch, wound round the arm, and extended to the wing, so that when a greater force of wind strikes the sail than is required, this spring gives way and diminishes the surface in exact ratio to its force; hence it cannot revolve with any more speed in a gale than in (as we sailors say) a royal breeze. It tends to the wind like a weathercock; has no canvases or cloth for sails; no reefing, no furling of sails; requires no attendance,

and by a simple brake is made to stop. A spindle, 2 bevel cogs, and shaft, are all that is necessary. The latter is brought down through a pump log to the loft where the drum or cog-wheels is to be attached, as the case may require.

For grinding corn a simple cog wheel will give motion to as many run of stones as can stand around it, and be thrown out of gear at pleasure. For sawing, &c., a drum can be used with bands. When not wanted in motion for any considerable time, the wings can be hooked or pinned back. The power is in proportion to its size, and if found too much or too little in its operation, it can be regulated by extending or contracting the spring out or in on the wing; out to increase, and in to decrease the power. The arms or wings fly to leeward. The fan or wind board is about twice the width of the wings, secured to the frame of boards on each side, similar to a barn door. Any carpenter can make the whole, except shaft, spindle and cog wheels, which are of iron.

P. S. You can get but little insight by this, the only way is to see the model.

From the Boston Daily Advertiser.

The last Monthly Chronicle contains a statistical account recently published, by which it appears that the agriculturists of France possess the following number of animals:

Cows	766,310	6,681,000
Merino Sheep	30,845,532	
Common Sheep		

Horses and Mules	31,612,162
Pigs	1,635,000
	2,900,162
	43,449,162

In Mr. McCulloch's statistics of the British Empire, published in 1839, the number of oxen and cows in Great Britain is estimated at 5,220,000. Sheep and Lambs in England 26,148,463.

do do Scotland 3,500,000

Horses, probably including Mules 29,648,463

Pigs, the number not stated by McCulloch, but are estimated by another writer, including those of Ireland, at 18,000,000

do do 54,368,463

By the census of 1840 there were found in the United States

Neat Cattle 14,971,556

Sheep 12,311,394

Horses and Mules 4,335,669

Swine 26,301,298

94,919,622

Supposing the foregoing estimates of the number of these animals in Great Britain and France to be correct, it follows that there are in the United States upwards of three millions of neat cattle more than in both Great Britain and France together. France has upwards of twelve millions of sheep, and Great Britain upwards of ten millions more than the United States.

If to the number of horses in France used for agricultural purposes be added, three hundred and forty four thousand, for the cavalry and other uses, it gives for that kingdom a total of two millions—these added to the fifteen hundred thousand in Great Britain fall short of the number in the United States by more than eight hundred and thirty-five thousand. The Swine in the United States exceed those of France, Great Britain and Ireland together by about four million four hundred thousand.

From the above it will be seen, that with the exception of sheep, there are many more of each of the other animals in the United States than in France and Great Britain together.

Q.

The unborn starz was penned in an Album at Niagara by Lord Morpeth, on his late visit to the Falls. Every generous mind, and every friend to the two countries must cordially join in the prayer.

There spend their rage, nor climb the encircling steepers, And 'till the conflict of thy surges cease

The Nations on thy banks repose in peace."

Protecting Home Industry.

MR. ELLISON—I observe, by the freedom of your own remarks as well as by the conflicting sentiments of correspondents admitted to your columns, that you are no enemy to the free discussion of all questions connected with the general prosperity. On the subject of a tariff, I see two articles in your Farmer for June—one of S. W., the other of Old Humphrey of the Genesee. Plain working folks like me, don't know much about "the theory of a Protective Tariff and retaliatory duties," or indeed about theories of any kind; and if it would not be deemed rude, I would venture to say to S. W. that, after looking over several of his well polished communications, a number of us have come to the conclusion that if he were a practical working man, he would find less time, and perhaps have less disposition to theorize. The last I heard of him, he was with Zelia in the Saloon, contrary, as I understand it, to express regulation. But if I was you, I would not make a fuss about it—better let him be—for that, of all places in your boat, is the very spot for him.

The first statement made by S. W. which I judged material to the support of his anti-tariff theory, astonished me, for it was indeed news to me, and I think will be to you, that New England, the great workshop, has never advocated a high tariff. I have all along supposed that she cried out as loudly, as unitedly, and I may add more effectually, for a tariff than Pennsylvania; and that she has steadily and perseveringly pursued a policy forced upon her by non-intercourse and embargo measures, and in which she was induced to embark much of her capital to supply the demand created by these measures, and rendered apparent by the war which shortly succeeded them. And why is it that factories, not a few among her cities or factories too, are closed, and the hands unemployed? Why, but because she cannot stand competition with the pauper labor of the old world—because the protection which her manufactures have enjoyed, and under which all have lived and many of them flourished, is about to be withdrawn? And does not New England know all this—and knowing it, has she not sought from Government the boon of that protection that ensures her prosperity? I cannot doubt it; for the Yankees, I take it, are among the last men on earth, to let any blessing slip by them unenjoyed because unasked. But near the close, S. W. says he is in favor of "a tariff ample for the purposes of revenue, framed with such discrimination as will favor both revenue and protection to our home industry." If Pennsylvania, "in the dark hour of her distress," asks for any higher tariff than this, I never heard of it, and you are welcome to say that I think her very unreasonable. But says S. W., "I always go for encouraging domestic industry and building up a home trade, as a certain market for the farmer." Them's my sentiments, Mr. Editor, and though S. W. and I may not have agreed entirely by the way, yet so cordially do I concur in his closing remarks that we part the best of friends.

At odd spells, between ploughing and pulling stumps, I have attentively read your friend Old Humphrey, and am by no means sure that I understand him. He speaks approvingly of a tariff for revenue only, and immediately adds that it should be imposed with such discrimination as to protect such of our manufactures as most need it. Now so far as I understand, this is about all any body wants. And yet in the next paragraph he seems to speak of a protective tariff, as evil only, and that continually. I cannot understand this, and without desiring to censure the old gentleman, I must say I think him a trifle metaphysical, according to the Scotchman's definition of it,—“when ye hear a man talking and cannot understand what he means—and when he that's talk-

ing does not understand what he means himself, that's metaphysics."

Not long ago I heard a laboring farmer address a meeting of laborers on the subject of protection to home industry. He started with the position, that the habit of business that contributed to the thrift and prosperity of a family, had no necessary connexion with its number; and consequently that those prudential rules and economical habits that would create and secure the prosperity of a family of five or seven, were in general equally applicable to our great American family of seventeen millions. Every economist knows at the end of every year whether he can make the two ends meet. If, after disposing of the produce of his labor to the best advantage, he finds that he still owes for articles purchased, and that the balance of trade is thus against him, or in homely phrase, that he has bought more than he can pay for, he is forced to the conviction that he can recover from the embarrassment and prevent its recurrence *only* by selling more or by buying less—or best of all, by doing something in both ways. For so surely as he continues to buy more than he sells, and year after year runs behind hand, so surely is he bankrupt. When the farmer can pay the shoemaker in the produce of his farm he had probably better make the exchange than make his own shoes; but if he requires in payment that which the farmer does not make or cannot produce out of his labor, he had better sit in the house where he can do without shoes, than buy them with the certainty that they will be worn out in travelling the road to inevitable ruin. These positions, it was argued, had an application to every variety of human intercourse, and were as true of families as of individuals, and of nations as of families.

Protection to manufactures, by affording higher wages, would draw off from a redundant agricultural population, so many as would equalize production and consumption, thus rendering each one's labor more profitable—for it is clear, if you make consumers of those who are now producers of food, that agricultural labor will be better paid. Protection to home industry will produce on the currency those beneficial results which are confidently predicted of National Banks, Sub-Treasuries and Fiscal Agencies. So long as we continue to buy more than we sell, so long will there be a constant stream of specie running out of the country—for specie is the only article with which we at the North can pay foreign debt. Cherish home industry, and you will have no call to send specie abroad, after existing debts are paid off. Divert this exhausting drain—dam up this ceaseless current, and retain it with its constant accumulations in the country, and you have the only safe and reliable basis of a sound and healthful paper circulation. The country is thus rendered truly free and independent—a position demanded not less by our interest than our national honor. Such were some of the views of my friend, and I thought he hit the nail on the head.

Yours truly,

June 27, 1842. JOHN FARMER.

From the Salem Gazette.

Leather Business of Danvers.

The following statement has been obtained for our use, and we take pleasure in laying before our readers the statistics of so industrious a community as that of Danvers. The well known accuracy of the compiler imports to it perfect authenticity.

A statistical account of the Shoe and Leather business in the town of Danvers for the year 1841, compiled from the returns made by committees appointed in each department of the business, who reported specially what was done by each person engaged in it.

1. Boots and Shoes, manufactured,—224,000

Estimated value, when ready for market, \$650,000
40 per cent of this is labor applied—1255 males are constantly employed, and 946 females.

2. Tanning and Currying—373,800 sides of leather.

10 per cent of labor applied in the process of tanning,—20 per cent of labor applied in the process of currying upon leather. A large proportion of the leather tanned here is also curried. 329 males are constantly employed in this business.

The Real Estate, consisting of tanneries and mills used in this business, is valued at \$123,000. 6500 cords of bark are used in the tanneries, estimated at \$8 per cord, when delivered at the yard, \$50,000, 9 10ths of this is the result of actual labor applied. The transportation of the bark from Maine to Massachusetts employs 15 vessels of 80 tons each, and 60 men. The transportation of hides from South America employs 5 vessels of 200 tons each and 50 men. In addition to the above, citizens of this place are concerned in tanneries in Maine and Vermont, from which they receive leather ready for the market, of the value of \$200,000

3. Manufacture of Skins—150,000 dressed annually.

Estimated value when ready for the market, 90,000

40 per cent of this is labor applied,—44 males constantly employed.

Gross amount of the value of materials brought to market annually by our manufacturers,

\$1,732,900

The whole number of persons employed as stated above is 2630. Supposing one third of the next proceeds to be applied to a compensation for their labor, this would give about \$214 to each person, not by any means an extravagant compensation for their labor. It is not pretended that the amount of capital employed is as large as the sum above stated; because some of the articles are twice estimated.

Such for instance is the case with the leather purchased by the currier of the tanner. It will also be remembered that a large part of the stock worked in the shoe factories is purchased in the New York and Philadelphia and Baltimore markets.

The foregoing estimates are the best approximation to the facts, that I have been able to obtain from an examination of the returns of men practically engaged in the business. Throughout it has appeared to me they were not disposed to overrate their business. A more sober, industrious, and mind their own business class of people, than the manufacturers of this place, it will be difficult to find in any community.

I hope sir, that the above statements, hastily sketched, will be found a satisfactory answer to your inquiries. Very respectfully and truly yours,

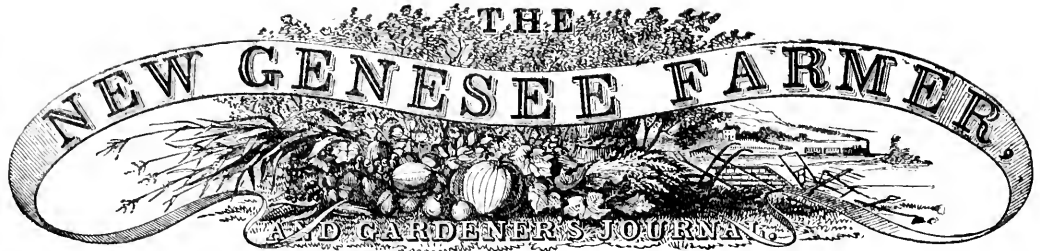
Danvers, March, 1842 J. W. PROCTOR.

On the Effect of Carrots on Horses.

From the Editor of the Mark Lane Express:

SIR—In answer to a query in your excellent paper of the 10th inst., respecting feeding horses on carrots, I am unable to give your correspondent any lengthened experience on the subject; but since I have given my horses (twelve in number) carrots, I have not perceived any ill effects from them, neither have I ever heard the root accused of injuring horses' eyes before; but the chief reason of my replying to your correspondent, is to inform him that the parsnip, a root having great affinity to the carrot, is thought to have this effect, as he will perceive by the following quotations from Quyle's Agriculture of the Islands on the coast of Normandy, drawn up for the consideration of the late Board of Agriculture. Under the head, parsnip in the Island of Jersey, he says:—"Horses eat this root greedily, but in this island it is never given to them, as it is alleged when kept on this food their eyes are injured." Again, in the island of Guernsey, he says:—"To horses, parsnips are frequently given, and have the property of making them sleek and fat; but in working, they are observed to sweat profusely. If new, and cut sufficiently small, no other ill effect results, except indeed, at one period of the year, towards the close of February, when the root begins to shoot; if then given, both horses and horned cattle are subject, on this food, to an inflammation in the eyes, and epiphora, or weeping; in some subjects perhaps producing blindness." Trusting the above extracts may prove interesting to your correspondent. I remain, &c.,

January 24th. DEVONSHIRE FARMER.



M. B. BATEHAM, Proprietor. { VOL. 3. ROCHESTER, SEPTEMBER, 1842. NO. 9. } HENRY COLMAN, Editor.

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METEOROLOGICAL OBSERVATIONS.
MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY
L. WETHERELL, AUGUST, 1842.

Date.	Thermometer.		Winds.	Moon.	Weather.		Rain Gauge.
	Shade.	1 o'clock P.M.			A.M.	P.M.	
26	60	86	72	74.76	s w	w fair	fair
27	72	80	63	71.33	s w	n w fair	fair
28	60	78	60	65.66	n w	n fair	fair
29	58	89	76	77	s	n fair	fair
30	71	88	55	69.83	s w	n e cl'dy	rain
31	53	61	52	54.16	n w	n e cl'dy	rain
1	46	60	54	54	n w	n w cl'dy	cl'dy
2	50	68	59	69	n w	n w fair	fair
3	50	71	60	61.66	n w	n w fair	fair
4	52	74	60	62.5	s w	n fair	fair
5	55	67	67	63.33	n e	n e cl'dy	rain
6	60	76	66	67	s	n fair	fair
7	58	76	66	67.33	n e	n e fair	fair
8	62	71	65	66.16	n e	n e cl'dy	cl'dy
9	63	66	64	64	n e	n e rain	rain
10	63	73	60	64.33	n e	n e rain	rain
11	60	77	62	66	s	n e cl'dy	fair
12	58	77	64	67.33	n e	n e fair	fair
13	64	82	66	70	n e	n e fair	fair
14	60	84	70	71.66	n e	n e fair	fair
15	62	86	05	72	n e	n e fair	fair
16	62	82	72	72.5	n e	n e fair	fair
17	65	80	70	72.5	s	n e fair	sh'w
18	70	84	72	73.66	s w	s w fair	sh'w
19	60	80	62	69.66	s w	s w fair	sh'w
20	62	66	59	60.66	s w	s w fair	sh'w
21	52	74	58	61.05	n w	n w fair	sh'w
22	53	83	64	67.5	n	n e fair	sh'w
23	58	89	68	73.33	n e	n e fair	sh'w
24	60	80	62	67.5	n e	n e fair	sh'w
25	61	74	71	69.83	n e	n e cl'dy	cl'dy

July 26th, fair; 27th, fair; whortleberries ripe; 28th, a little hazy; ripe peaches and apricots in mar-
ket; 29th, green corn in market; 30th, cloudy in
the morning; strong S. W. wind; commenced rain-
about 2 o'clock, P. M., and continued to rain un-
til the next morning; wind changed about the time it
began to rain to N. W. and N., about sunset to N. E.;
the greatest rain this year. The temperature of the
month has been about the same as last year; being
this year, (monthly mean,) 66.94 degrees—last year
66.79 degrees. The greatest heat, the 19th, ther. 91
degrees,—last year the greatest, the 24th, ther. 96
degrees. Rain gauge, July, 1842, 3.69 inches; ad.
1841, 4.58 inches.
August, named in honor of the Emperor Octavius
Augustus.
Aug. 1st, quite cool; rained a little about 2, P. M.
Tomatoes ripe. 2nd, fair, and continued so until the

5th; 5th, commenced raining a little after noon;
6th and 7th, fair; 10th, a thunder shower a little
south of this; 13th, dense fog till 9 o'clock, A. M.;
14th, foggy early in the morning; 15th, smoky dur-
ing the day; 17th, showers this P. M.; thunder and
lightning in the evening; 18th, gentle showers this
P. M.; 25th, very little rain.

AGRICULTURAL INTELLIGENCE.
MONROE COUNTY AGRICULTURAL SOCIETY.—The
Executive Committee and the Town Committees are
particularly reminded of their meeting appointed to be
held at the Arcade in Rochester, at 10 o'clock, A. M.,
on the 15th of the present month. It is confidently
expected that this meeting will be fully attended, as
arrangements are then to be made for the Show on the
13th and 14th of October. Other members of the So-
ciety it is hoped will attend on that occasion. The
spirit and success with which the show shall go off,
must depend entirely upon the interest which the far-
mers manifest in the matter; and the farmers of Mon-
roe county should not permit the greatest and best in-
terest of the State and County to lag or retrograde, for
want of their cordial cooperation. The town commit-
tees and others are specially reminded of the necessity
of their making returns of the monies collected, that it
may be determined to how much we may lay claim
from the State Treasury. The latter depends wholly
upon the former.

**Rules of Premiums and Forms of Certificates
of the Monroe Agricultural Society.**

The necessity of exactness in all cases of competi-
tion for prizes is obvious to every one; and in all cases
of agricultural experiment, where the principal object
is not the reward of the experimenter for his success,
so much as the gathering instruction from what has
been done, is equally apparent. Without this, the ex-
periments and results are worth very little.

As much inconvenience has resulted from a deficien-
cy in these returns or from great informality, it seems
extremely desirable to give to the farmers such forms
and examples as are adapted to the purpose; and notice
particularly the points to which, by law, the inquiries
of the Premium Committees will be directed.

The following forms of certificates were drawn up by
our friend L. B. Langworthy, and have received the ap-
probation of the Executive Committee. These certifi-
cates can easily be copied by any farmer and presented
to the Secretary of the Society.

I. This certifies that I this day measured a field of
belonging to of
in the county of Monroe; and found it to contain
acres rods, in which I again measured one
entire piece containing acre rods and
staked the same correctly.
184
Sworn to and subscribed before me
this day of 184
Justice of the Peace.
H. This certifies that we assisted to harvest the
whole of the crop of grown upon the above
land as surveyed and staked out by and

on measuring the same find the yield to be
bushels lbs, which measurement we know to be
correct and true.
Owner.
Assistant.
Sworn to and subscribed before me
this day of 184
Justice of the Peace.

Competitors for premiums on crops must give written
answers or statements in regard to the following points.
The nature of the soil on which the crop was grown;
whether clayey, sandy, gravelly, or loamy; whether
abounding in limestone or gypsum, or any other par-
ticular mineral; whether high or low, wet or dry;
whether drained or not; and if drained, how?

The condition of the land before this crop was
planted.
The crop which preceded it.
The amount of the next previous crop and the ma-
nure applied to it.
The manure, if any, applied to the crop for which a
premium is claimed; its kind, condition, and quantity.
Time and frequency of ploughing, harrowing, cul-
tivating, hoeing, &c.
The quantity of seed per acre, which was sown—
mention the kind and preparation of the seed, and the
time and manner of sowing.
Time and mode of harvesting and cleaning the crop.

It is necessary likewise to state the whole expen-
se of the crop; including the value of the manure; cost
of seed; number of day's works of man and team of
two horses; or the cost of the whole labor applied in
sowing, cultivating, harvesting, and preparing for use
or market; or the whole cost, rating the labor of a man
at 75 cents, and of a team of two horses at one dollar
per day.

Wheat Crop.
A good deal of wheat in Western New York has
been threshed and brought to market; and we are
warranted in saying that the crop, though abundant
and in general in good order, has not equalled the
early expectations and calculations by one quarter, in
many cases by one third less. Much of the wheat,
likewise, which has been brought to Rochester, has
evidently been damaged by being cut in too green a
state and afterwards not sufficiently ripened or dried.
This is a very serious matter. Early cut wheat will
undoubtedly make more and sweeter flour than that
which stands too long, and will yield more weight of
crop, but this presupposes that it is not cut too early,
and in the next place, that it is most thoroughly made
in the sheaf or stook. In some places the wheat suf-
fered from rust, and in reference to the inquiry re-
specting the use of rusted straw, one of the best far-
mers in the state expresses his experience that cattle
will not eat much of it, and his conviction that what
they do eat will injure them.—Ed.

Sale of Durham Stock.
We beg leave to refer our readers to the Great Sale
of Durham Cattle advertised to take place at the Ris-
ing Sun, three miles from Philadelphia, on the 8th of
September, instant. There are several animals of the
highest pedigree and character. The catalogue may
be seen at the store of M. B. Bateham, Rochester.

IMPROVED AGRICULTURE.

At the late meeting at Bristol of the British Royal Agricultural Society, Mr. Smith of Deanston, the author as he may be called of the Improved System of Thorough Draining and Subsoil Ploughing, was called upon to explain at large, his views and practice in a public lecture. This was done without writing, and has been reported at large in the agricultural press. We have condensed it from the Mark Lane Express, but have taken care to omit nothing that is essential to a full understanding of the subject. It is full of important matter, and will be read by every intelligent farmer with the deepest interest. The results of this system are beneficial in the most extraordinary degree, and bid fair almost to revolutionize the husbandry of Great Britain. The results are not more extraordinary than they are profitable, as it appears from the most undoubted facts, that while under the old system, a Scotch acre of land in a lease of 18 years would, after paying all the expenses of cultivation and rent, leave a profit of only £5. 14s. stg., for the whole time, and at the same time the quality of the land become deteriorated; under the Improved System, the land itself would be left in a highly ameliorated condition, and the actual profits for the same time, after expenses were paid, would be £64. 14s. sterling.—Ed.

LECTURE BY MR. SMITH, OF DEANSTON, ON DRAINAGE.

Delivered before the Members of the Royal Agricultural Society, in the Theatre of the Philosophical Institution, Bristol, Wednesday, July 13, 1842.

(From the Bristol Mercury.)

After apologising for the alteration of the time of lecturing, Mr. Smith proceeded:—

The dryness of land is of great importance—in fact, the dry condition of the soil is the foundation of all good husbandry. It is beneficial to the working of the soil; to the after-growth of plants. There is scarcely any labor of agriculture which is not facilitated by the dryness of the soil. If we find a tree stronger than his neighbor, we shall find that there the soil is deep and in a dry condition. If we see a stronger and darker-colored herbage growing on the hill side, there the soil will be found deep, and in a dry condition. There is not one of the various soils of the United Kingdom which will not be much improved by being placed in a dry condition, if they are not so by nature. Even on a subsoil or gravel or sand, the introduction of the thorough drain system would be beneficial, but so general is only a small portion of that sort of soil in this country, the greater part being super-imposed upon a wet soil, it becomes of the first importance to improvement in agriculture that means be taken to render the soil dry. Many attempts have been made with that view, but until the introduction of the thorough drain system, there was not the power of draining land, on whatever subsoil resting, and rendering it completely dry. The purpose of this lecture is to illustrate the principles on which this system acts; then, to show the advantages in carrying on the different processes with respect to the various crops; and then to explain the modes employed to render this drainage effective.

[Mr. Smith here illustrated by a diagram, his method of thorough draining; the soil, the subsoil, the drains, &c., being represented.]

In relating to two lines, representing the direction of drains, he had drawn one at a greater inclination than the other, to show the advantage of making the drains deeper than they generally were. The prevailing practice was to make the drains two feet deep, but he preferred an additional six inches—it was of great importance to allow the water to go off as quickly as possible, and this advantage was secured by cutting the drain to a greater declination. People suppose that at a great depth water would not go off at all, but this was a mistake. Another advantage from a deep drain was that it allowed the whole bank of soil to become completely dry, and it consequently required a very heavy rain to wet it. The action of the atmosphere too required to be taken into account. He would not enter upon the chemical question, but it was well known that soils were much improved by the action of the air, and this advantage could only be secured after the water was withdrawn.

To render the field completely dry, a great number

of drains should be cut, and they should be laid off in parallel lines beginning at the highest side of the field. This secures a thorough drying. When the lines run parallel, much greater effect is produced than when they are drawn across. When drawn across, the drains may catch the water, but it does not run off so readily.

The distance at which the drains should be placed, will depend on the soil. If the field has been subsoiled, the plough will form artificial channels in the soil below. If it is a stiff soil, it will keep long upon the surface; the more free the soil is, the greater tendency it has to allow the water to pass; so that on a stiff soil, such as the stiffer clays, taking into account the nature of the subsoil and the soil itself, about the same drain will serve on all soils. The distances are generally from 15 to 20 feet: in some soils individuals have put in the drains at 12 feet; but that is, in some degree, throwing away money. From observations which I have made myself on all sorts of soil, I recommend about 16 to 20 feet as the distance from one drain to the other.

The way I usually proceed in draining is, first, to find a good bottom-level to run the drain into. In some parts of the country there is difficulty in getting an open level to carry off the whole water of the district; but by a proper engineering it may be accomplished in most situations; because it is found that if proper channels are executed, a larger quantity of water will be discharged with a very small fall. In an endeavor to carry off water, I found that in a drop of four inches in a mile, thirty feet wide and six feet deep, I could discharge 300 tons of water per minute; which is much more than would fall in a very extensive district indeed, 160 that if means be taken to carry off the main level, a fall may be had.

I should make the great main drain, if possible, about four feet deep—three feet six inches will do; but in order to have a drop from the one drain into the other, I make the main drain four feet deep, the receiving drain three feet deep, and the parallel drains two feet six inches. When there is any rise in the ground, or any hollows over which the water cannot very well flow, it is necessary to make a cad's drain. That should be made about six inches deeper than the other drains which fall into it; then running on, it discharges itself into the main drain.

As to the manner of executing the drains, various modes are recommended, and on looking to land which has been drained a great many years, where the draining has been performed carefully, all the different modes employed for the purpose of keeping the drains open have been effective. A great deal of the want of effect in the duration of drains has been owing to bad execution. In some instances fagots have been introduced for the purpose of preserving the openings of the drain, and these have been found to continue and to preserve the openings in a perfect state for nine—in some instances, for twenty years.

In Scotland the peat-top is frequently used to form the tiles for drains. It does well in clays which are pretty stiff, but not so well in softer soils. In some sandy soils, the sides not being sufficient to resist the pressure of the top, the tile gradually sinks down and closes up the drain.

Another mode of filling drains is by stones broken into the usual size for making roads. Much has been said against the use of this sort of filling, but when properly executed, the work is as durable as can be required. Where stone can be had, and tiles are expensive, I should prefer it to the tiles; it prevents any vermin from travelling in the openings of the drain, such as rats and mice, which do a great deal of mischief. The great point is, to be careful in covering over at the tops. As soon as wet comes, the sand and other materials effs down into the stones, and they are choked up. I have found drains carefully executed completely destroyed in the course of a couple of years, if drains are packed that the water falls down on both sides, the parts over-lapping each other, there is no opening whatever for the sand to find its way down. If drains are carefully cleared in this manner, I will warrant their duration for almost any period of time. I have executed myself about 130 miles of drain in this way, and have had them all filled with stones; many of them have been done 15 years, and there has not been a single instance of failure.

A gentleman in the theatre inquired the nature of the soil in the case alluded to.

Mr. Smith replied, both on a gravel and a clay soil. Many persons have asked whether or not the drains would be choked up in a rainy season. I have always asked them what position they referred to, and have opened it up that they may see; and in no instance have I found a single drain choked up. I have

the drains of 100 acres all discharged into one pond, provided for the purpose of seeing how much deposit came from the drain; and although we have had heavy rain, I have never seen the water in the pond tinged as if there was much soil in it. I can, therefore, safely recommend stone as a sufficient drainage; and in many parts of the country it is much cheaper than tiles.

The next filling need for preserving the opening of drains is the drain-tile. These are usually made of clay, and burnt. They are very handy and useful; and where stones are not to be had they are to be preferred. But there are districts where the clay-tile cannot be procured at any reasonable price. Lord James Hay has recently discovered a method of making them of concrete stones cemented by lime; in most instances they will come considerably cheaper than the brick-tile, and, if executed on the ground, where they will not have to be carried far, the breakage will be found to be very little, and they will prove to be durable. The cement made of lime is more lasting when covered than if exposed to the atmosphere.

There are two other modes of making drains—peat-earth has been cut into a shape somewhat like a hollow wedge; and a sort of instrument has been made for the purpose of cutting peat-earth into the form of the tile, so as to produce an opening not liable to the objection of the wedge, which frequently sinks and pulls up the opening. A stone is frequently used to lay the concrete tile upon, and prevent its sinking. It is also made of concrete.

Many persons have expressed the opinion that, in some of the very stiff clays, drains of this sort would not be efficacious, and that the application of the subsoil plough after the draining would have no good effect. With the view of showing the beneficial results, both of draining and subsoiling, I have brought some specimens of different clays, in order to show what improvement can be made. Here is a piece from the Pass of Stirling. This kind of soil has been cultivated from a subsoil, and has been known to produce excellent crops of Swedish turnips. Here is another very hard clay from Yorkshire.

A gentleman inquired how long after the subsoiling the land assumed a different character.

Mr. SMITH—Almost immediately—in the very first year. It requires some years before it becomes adapted for a turnip soil. I have a specimen of some soil which twenty years ago was so extremely stiff from the alluvial deposit in the Pass of Stirling, that it required to be broken with large mallets, to reduce, mechanically, the great lumps of soil. Thorough draining or subsoiling was never thought of till about twenty years ago, when this land was first drained; and now they get from it splendid crops of turnips, and in almost any season.

A gentleman wished to be informed of the nature of the soil in Mr. Smith's farm.

Mr. SMITH—It varies. In some parts it is sandy clay, and in others, clay perfectly impervious to water. When I first began to subsoil there was not more than three or four inches of active soil, properly so called, for growing plants; after a labor of about fifteen years I have now an active soil of sixteen inches, and can turn over that now in any part of the farm.

How near are the drains in order to produce that result?

Mr. SMITH—Twenty feet. I think a distance of about eighteen or twenty feet from drain to drain is a proper distance for almost any subsoil. I shall now proceed to detail the application of the subsoil plough.

When I began to cultivate my own farm, although I had put in the drains, I found they were not so efficacious as expected, and I then began to think of stirring up the subsoil, which gave rise to the idea of the subsoil plough. I thought I must construct an instrument which would exert the power of the water with the least possible power. I made my plough strong, and of that form to which the least resistance would be opposed, at the same time taking care to have sufficient power fairly to stir up the soil.

I will here explain the principle of the subsoil plough. The great principle is, that there are many subsoils, which, though capable of being converted into a good soil, yet if brought up and mixed with the active soil, will so far deteriorate it as to make it for some time sterile. The great point is to stir up the subsoil, still retaining the good soil on the surface. Stirring up the subsoil would, in the first place, very much facilitate the escape of the water into the drains; and in consequence of the passage of the water through the stirred up subsoil, and the attendant admission of air, it would be so acted upon as to be converted into good soil, while at the same time have all the advantages of working the active soil as before.

Upon the application of this principle, I have been successful in every instance. The process of applying the subsoil plough is this: a common plough goes along first, and removes a furrow of the active soil. After that the subsoil plough passes along below, and scarifies the subsoil to the depth of from twelve to sixteen inches, in some instances eighteen inches. This is continued furrow after furrow, the plough going first to lay the active soil on the part already opened up; then the plough comes a second time and takes off a furrow from another part of the soil, and places it on that which is already scarified.

As to the proper period for applying the subsoil plough in places where the drains have much effect, the subsoil plough may be applied the following year; but in clay soils it is important to give the clay sufficient time to dry, and to have it in a friable state; because, in the application of the subsoil plough, when the subsoil has been recently drained, and it is not sufficiently dry, more harm is done than good: the clay being worked in a wet state is almost prepared for making bricks. If we once work it in that state it is a long period before it recovers its friable property again. Therefore, in soils rather free, the subsoil plough may be used the second year after the drainage.

The proper time to execute drains is the summer season; you can then get it much more dully done, and the drains are prevented from running. In many places there are little sandy veins and portions of running sand, which are very apt to fall in before the drains are covered up. In the winter season this is almost sure to be so; you may be taken with frost, which draws off the adhesion of the earth, so that it falls down, and fills up the drain. It is best to execute them in grass land before it is broken up for cropping, otherwise it is too early. Executing it therefore in the summer season on the less produces very little loss, because the growth of the grass in the after part of the season will be so much increased by the execution of the drains, that you will be repaid for the time lost for the use of the pasture during the time the drains were in process of execution. After the drains have been completed, take a crop from the land, and if the land has been pretty good, it will, perhaps, afford two crops; at all events, one crop should be taken; that will pass over one summer before the subsoil is to be ploughed. During this season, the earth between the two surfaces has time to dry; it is more friable, and the subsoil plough will be more efficacious in stirring it up. It often happens that there are stones in the soil, which must be removed before you can proceed with good husbandry; and it will be found that, in consequence of the contraction of the soil, they have become in some degree loose, and will be turned out very easily by the subsoil plough. In many instances we have stones exceeding 200 lbs. weight, which are turned out very easily by the subsoil plough with four horses.

With regard to the direction in which the subsoiling ought to be carried, I should say at right angles with the drains; you thereby form channels, from the centre to the side, in all directions. In that manner you form artificial channels from the centre of the ridge into the drain; these may partially close up, still there is an openness given to the subsoil, which will permit the water to pass freely.

Having thus applied the subsoil plough to stir up the subsoil, the after cultivation may be the common rotation of the country, such as the farmer thinks suitable. When agriculturists have subsoiled their land, they should lay down the land to the surface, with the ridges and furrows, exactly on stiff land, a great part of the best of the land runs down into those furrows, and is deposited in large quantities at the bottom of the ridge, thereby doing a material mischief. If laid in a flat form you get rid of this evil, and obtain this advantage—that if the water is beneficial to the soil, which it certainly is, you have that benefit equally distributed; every part receives its own water, and the benefit which the water can give.

It is the suggestion of scientific gentlemen that the

rain in falling from the atmosphere absorbs a considerable quantity of ammonia; and if there is any of this in the soil for ammonia, if the soil wants ammonia, the affinity will extricate the ammonia from the water, the ammonia will extricate in the soil, and nourishment of plants. Where artificial manure is put into the soil, some of the fibrous parts of it will be carried away with the water, and be carried down to the region to which it belongs; and although not so near the surface as it was before, it is near enough for the plants to reach it when they put down their roots.

A peculiar change takes place in any subsoil—it does not matter what composed of—after it is ploughed. This change begins to take place immediately, and the soil gradually goes from the state in which it was before to that of a new soil. If you examine a soil which has become mould, it is of a peculiar structure. It appears as if all the particles were connected together, and it seems to have some attractive property by gathering together in that way. Vacuities for the air are thus formed, and there is a tendency to absorb and retain as much moisture as is useful to the plant. If filled entirely with moisture it is injurious to the plant, but if a certain quantity, becomes beneficial; and when a great depth of soil is attained, there is great advantage indeed, in either a wet or a dry season. In a wet season the water flows away, leaving the soil in a dry state; but in consequence of the mouldering state in which the soil is, it is retentive of moisture, and there is a great magazine of water preserved in soil for a dry season. Being covered by the active soil, the drought may penetrate a few inches, but in consequence of the lower part of the soil being covered with this upper stratum, it is defended from the extreme action of the rain, and a very dry atmosphere. It will be found that in soil so treated and converted into this mouldy condition, in dry seasons sufficient quantity of moisture will be retained for the use of the plants, which will grow vigorously when land in the same neighborhood is completely dry.

I do not think that it is possible to drain land too much, from the fact that the mould becomes an excellent magazine for the retention of moisture. A circular area took place in regard to this in my own district, in 1826, a very dry season. In that year there was so long a period of dry weather that the pond was dried up, and there was a great deficiency of crops. I had a field which had been trenched in the way I have explained, and I had a crop of hay on it. The hay in the country round produced not above half a crop. On this field, which I had ploughed to 16 inches, I had a splendid crop. A proprietor of land in the neighborhood, one of the old school, resisted to the utmost with regard to the result of thorough draining and subsoil ploughing. A person occasionally employed by me was also engaged in doing work for him. He had asked about this way, and thought the gentleman was rather puzzled at the state of the crop, and exclaimed that he really thought I had drained my land so much that I should have no crop at all. He was immediately after this completely weeded to the system, and from that day he has been vigorously engaged in introducing thorough draining and subsoiling all over his estate; and he is now having a great deal of poor soil, on a very rich and productive estate, treated in the same way. Taking the average of that gentleman's estate, he now produces double the quantity of corn that he used to obtain. He now grows potatoes where he could not grow them before, and on the old clay he produces regular and large crops of turnips.

An inquiry was made as to whether there was any land where subsoil-ploughing would be successful without thorough draining.

Mr. Smith—I am much obliged for that hint. Many persons have thought that ploughing the subsoil might do without thorough draining, but there are few instances indeed in which that application of the plough will not be hurtful instead of being beneficial. If you have a retentive bottom which will not allow the moisture to pass away, it must remain till absorbed by the atmosphere; therefore the greater the chambers for receiving rain, so much the longer will the land be kept in a wet state. The practice which now prevails in the English clay districts of ploughing with a shallow harrow has arisen from the experience of ages, which has taught them that on such soils you cannot cultivate wheat if you plough a deep furrow, because you make just so much the larger chambers to receive water. Even in open soils I would not recommend the application of the subsoil plough till the thorough draining had been executed.

A gentleman asked if it was necessary to repeat the subsoil ploughing?

Mr. Smith—It may not be essentially necessary to repeat the subsoil ploughing, but it is beneficial. I repeat the ploughing at every shift, every time I break up my fallow.

Is it always done in the same line?

Mr. Smith—Generally; sometimes I have done it obliquely.

Did you ever try it diagonally?

Mr. Smith—Yes; perhaps it is better to do it in that way according to the drop of the land. The first idea I had was to use the subsoil plough; then I thought I might use the trench plough, and that I might, the next shift, turn up the whole soil, so as to have a complete mixture. In some fields, where the soil was of a better quality, and there was more vegetable matter, I had excellent crops; on the poorer soils, I found that by bringing up the subsoil to mix with the active soil, after the first shift, I did a great deal of mischief. I found, especially with regard to grass, that I could not get that growth of plants which I had before; immediately on observing that, I resolved a third time to go over those fields, and that I would again use the subsoil plough; I have now fallen into the practice of doing so every time I turn. I took up at the first shift, perhaps about 3 inches, even in the poorest field; the next time 3 inches more; and by that means I gradually attained a thorough depth of soil to the extent of sixteen inches. On my own farm I have a thorough depth of sixteen inches, but that is in consequence of using a trench plough on the second shift; and in some fields that was unsuccessful. If I had had then the experience I now have, I would use the subsoil plough at each shift; instead of going down the whole sixteen inches, I would only take up perhaps three inches the first time and three the next, till I had completed the depth of sixteen inches.

A Gentleman—In draining in the summer season, how do you get the level?

Mr. Smith—By the spirit-level, of course.

A Gentleman—The great object would be to get it done cheap; but it would be much more expensive if done in the summer.

Mr. Smith—No doubt; but if I had the choice of executing drains during the winter, at an expense of 50 pence I should have them done in the summer, I would prefer doing it in summer. The efficiency is of far more importance than the expense.

In summer sometimes the land may be too hard?

Yes. In some places, but the bulk of the land will retain as much moisture as will enable you to get through it with the plough. Of course that will vary in different parts of the country. In some places it had better be done when the ground is more moist. Still, I would recommend it to be done, not in the winter, but in the spring or autumn.

A Gentleman—I may be perhaps allowed to say that there are cases where subsoil ploughing is effective without any drains; for instance, in the soils of the moorlands. I have tried it myself in the moorlands, and have found that by simply breaking up that pan which holds up the water, which made the lands dry in summer, and wet in winter, all the water escaped; and lands before not worth 5s. an acre, let for 20s. after it was done. That was certainly a peculiar case.

A gentleman inquired whether the rocks under the stratification were horizontal or perpendicular.

Mr. Smith—There was very little stratification at all. I am aware of what has been stated with regard to destroying the pans, such as are placed upon gravel; but, thorough draining may be applied with advantage to the soil, and that in a considerable distance, and consequently the water will be long in finding its way out, if it gets into the channel it will go off easily. Those dry soils retain moisture a great deal too long for agricultural purposes. A neighbor of mine was draining his land—a sort of irregular subsoil—and in some places had very considerable runs or rising ground with sandy and gravel bottom; he instructed his steward to stop the drain when he came to those holes. This was done, and two winters after the gentleman was coursing one day, and all at once his horse sunk over the fetlocks in the soft ground. He called out to his steward to know the cause, and his steward explained that this was the portion of land on which he had desired the drain to be stopped. This fact illustrates what I have said, that when agriculturists are determined on draining a field they should resolve to drain it wholly, otherwise they are only throwing the expense away. Where persons have drained wet parts, and left what they considered dry undrained, they have soon found that the land formerly the wettest was then driest, and when the part which had been drained was ready to receive the seed, they were de-

layed a few days till the other portion was sufficiently dry. In a country where we have much changeable weather, all agriculturists know the advantage of a single day. If a field is uniformly drained all over, you will, perhaps, be able to sow your seed one, two, three, or four days earlier than if it were not drained; sometimes you lose the opportunity altogether, because it frequently happens that two or three days intervene; very newly dried land will be ready for being sown, whereas other land, which was not drained, would require a week or fortnight before you could sow it.

With regard to the application of thorough draining on porous bottoms, no doubt much good will be effected without subsoil ploughing. I have found it most efficacious on sandy and gravel bottom. I have known instances of land of that nature being very greatly improved after being stirred up by the application of the subsoil plough.

A Gentleman—Your observation apply to thorough draining; many people call it *furrow* draining. I wish to know whether you have any reference to deep draining, and how, as in the case of a spring lying deep, you meet the difficulty occasioned by the water. Two feet and a half drains would not touch a spring such as that described on the diagram. How do you get away the spring water?

Mr. Smith—They are called furrow drains, because they are made in the furrows. I call the mode of doing thorough draining. I use the term to express the result. They are called sometimes wedge drains, top drains and tile drains; but the principle that you have the drains sufficiently close together to carry off the water quickly; and then, that the best mode of laying them off for that purpose is to arrange them in parallel lines, and carry them as much as possible in the sloping direction of the land.

With regard to springs, the spring water can do no harm till it enters the subsoil: so long as it keeps below that, you need not care about it. The moment it reaches the bottom of the drain, it finds its way into it, and will be carried off by it. I have found it necessary, sometimes, to carry a drain through the eye of the spring. Springs sometimes come in little channels, at other times in a sheet, according to the nature of the subsoil. When they come in a sheet, the cross-cutting completely sacrifices them. If a spring comes out a round opening and happens to fall in between two drains, I have found it necessary to cut the drain into the eye of the spring. But in every instance where the water flows between two beds, I have found that, by cutting the drain across, it was completely cut off.

I will now describe to you the mode of constructing the draining tile of Lord James Hay. One way of doing it is to construct the tile on the ground, and then carefully place it in the drain; the other is to execute it in the drain as you go along, and immediately to take it up. The composition of the tile may be varied considerably, but the proportions which I have found to do very well are—

Lime..... 1 part
Blackened cinders..... 64 part
Sharp fine sand..... 3 parts
Gravel..... 3 parts
making altogether 74 parts, or I measure of lime to 64 of sand and gravel: the cinders may either be used or not. The gravel selected should not be of a large size.

A question has been handed to me, as follows:—"What effect have thorough draining and subsoil ploughing on the habit of throwing out the wheat plant by frost?" It is well known to be owing to the fact that the wheat plant is thrown out, and whatever removes the moisture, will have the favorable tendency required. I have known many places where almost every winter the greater part of the plants were thrown out. Now, the result of thorough draining and subsoil ploughing is that they retain the plant perfectly well, and have very abundant crops.

The best of the two modes which I mentioned of forming the tiles, is to make them just where the drain is wanted, and in a few days they will become so dry that they can be placed in the drain. One disadvantage is, that these tiles will not stand carrying for a length of time. They require several months before they will admit of being laid one over another. But, in most instances, the making of the tiles can be accomplished on the spot, and in the course of a few days they may be put into the drain. It is, then, of great importance to cover them immediately with some light soil, free from stones, and to beat them down so as to preserve it from injury. If there are any stones in the soil, they may get down to the tile and seriously injure it.

[The lecturer then exhibited the method of form

ing the tiles in the drains, which is done by placing the mould in the place in the drain to be occupied by the tile, then laying upon it the concrete, and after pressure by an instrument similar to that used in the former process, drawing out the mould by means of a long handle attached to it for that purpose.]

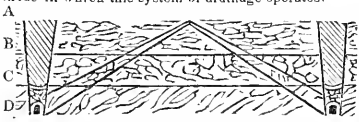
I have an interesting communication to read from Scotland, which, though not immediately connected with the subject before us, bears intimately upon it. There are great doubts respecting the propriety of putting seed deep into the soil, or covering it very lightly. Experiments have been made on that subject, but none so conclusively as that which I have now before me, which relates to the springing up of the more tender seeds, the grass seeds; and it shows the great importance of having a shallow covering over them. This experiment was made by the Messrs. Drummond of Stirling, the individuals who first introduced the agricultural museum.

This experiment tends to show the great importance of a light covering to grass seeds. I have made a barrow of a peculiar construction, which reduces the surface soil very much without tearing up the ground. It has no teeth, but acts by little sharp discs, closely set together, which curve very slightly. I have found this instrument also very efficacious if used as a bush barrow.

Continuation of Mr. Smith's Lecture.

The report of Mr. Smith's Lecture was given from the Mark Lane express, which did not contain the diagrams to which Mr. Smith is reported to have referred when lecturing. After that report was in type we received a second copy of the Lecture in the London Farmer's Magazine, with the diagrams. For the gratification of our readers we subjoin these diagrams with the accompanying explanations. Though not in their original position, they will not be found out of place; and the more report of this lecture to any intelligent farmer, is worth ten times the annual subscription of our paper.

I shall first endeavor to illustrate by a diagram, the mode in which this system of drainage operates.

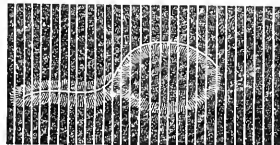


A represents the atmosphere, B the active soil, and C the subsoil stirred by the plough; D represents the part of the subsoil above the level of the drain. When the ground has been so drained, the first effect that takes place is the drying of the subsoil, which begins generally at the drain, however close and dense it may have been; it begins to crack there by the water giving way. These cracks are continued till they pervade more or less; and in the course of a few months, or perhaps a couple of years, they may have obtained complete effect; the whole of the soil has become dry. The soil which has been worked before on the surface of the subsoil, is in an open state from its former working; the rain falls on the earth, and is received into the intervening spaces, the chambers all receiving so much rain, and the different parts of the soil absorbing a quantity of rain. But while the rain is falling, the drains are carrying off the water from the whole mass. Of course when the rain ceases to fall, this water goes off more rapidly. At first it will be brim full (if I may use the expression) of water; it is constantly running off, and the water gradually subsides.

The usual practice is to make the drain two feet deep, but I prefer two feet six inches, for this reason, that it is of the greatest importance that the whole subsoil flow off as rapidly as possible. Persons are apt to suppose that the water will not find its way to a drain at a great depth, but that is in some measure a great mistake. When there is more water to pass through, there is more retardation to the passing of the soil; but, notwithstanding, by giving the drain the inclination which I propose, you have the water carried off much faster. There is also this advantage—that when there has been a long season of dry weather, the whole of the bench becomes completely dry; and in that case it takes much rain to wet it, and if the rain is not very abundant, perhaps the water will not stand higher than B. When water falls upon the soil, there is one very great advantage in having a large bench besides. There is a quantity of air which fills all the vacancies in the soils—the active

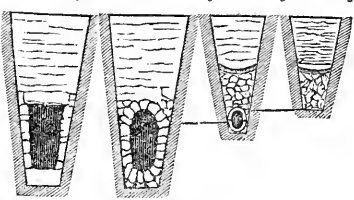
soil itself, the stirred subsoil, and the subsoil which has been laid dry. When the water has drained off, air takes its place, and the action of the air is very beneficial on the whole of the soil moved, particularly the active soil; and just in proportion as you have a great area to receive the water, and to receive air as the water is drawn off, so in proportion you have a tide of atmospheric air passing through the bed of active soil which is found very much to improve it. We know this soil is very much improved by exposure to the atmosphere; but if it improves in a greater degree by exposure to the sun and light, it is still importantly improved by the passage of the air to the lower strata when the water is withdrawn.

In order to render a field completely dry, it is necessary that a great number of drains should be placed in it; and the position in which they should be arranged will be obvious from this diagram, which represents a field sloping down, with a rising ground in the centre, and rising ground towards the side.



This is made for the purpose of illustrating the mode of laying off drains, and the mode of catching the water when any hollows intervene. In laying off the drains, you will drain the field more effectually by laying them off in parallel lines, than by doing it in any other form: because, if you depart from the parallel lines, you get into corners, and into some spaces not so near the drain, and others too far from it. But in laying it off in the manner shown in the diagram, you get a complete effect on the whole surface. When drains are laid off to run in the direction down the slope, they have a much greater effect in draining than when laid across the field. It is rather difficult to induce persons to believe this, but it is the fact. If carried across the field, though they may catch the water, yet, having less declivity it will remain longer at the bottom of the drains. Another objection is, that the water which is there retained, has a tendency to sink away to the sides of the drain, and therefore will probably come up some distance below the drain. But if the drains are carried in the direction pointed out, you cut the drain so that the water constantly sinks into it; and though it may fall a little into the slope of the hill, yet the greater part of it goes to the drain.

[Sections of the several kinds of drains referred to.]



Paste for Sharpening Razors.

Take oxide of iron levigated, vulgarly called prepared putty, one ounce; saturated solution of oxalic acid, a sufficient quantity to form a paste. The composition is to be rubbed over the sloop, and when dry a little water or neat's foot oil is to be added. The oxalic acid having a great attraction for iron, a little friction with this powder gives a fine edge to the razor.—Eng. Pub.

Important Notice.

There is a large amount due us from Post Masters and Agents in the Western States and elsewhere, mostly in small sums it is true, but our whole resources depend on such small sums, and therefore we hope no one will delay sending on that account.

One word to our friends.—We have a large supply of book numbers of the current volume on hand, which ought to be in the hands of subscribers. Will you not help us—would you not be doing your neighbors as well as ourselves a real kindness, by soliciting them to subscribe? The currency is now considerably improved, and bills of most of the states will answer for remittances. —PUBLISHERS.

Salt for the Grub Worm.

Mr. COLMAN—In examining a neighbor's field of corn, I perceived some of it cut off by the grub worms, and deemed it best to examine my own. To my surprise I found they had been destroying my own at a great rate; and had made their way into the garden and were engaged in cutting off the cabbages at the rate of four or five every night. It appeared that they did not touch them by day; and when I went out in the morning I found my cabbages gnawed off close to the ground. I first applied ashes to the hill, but without effect; then soil, but it was like the wind and did not affect them. Scotch snuff was then recommended to me, but it availed nothing against them. The June number of the New Genesee Farmer, however, arrived about this time, in which it was stated that salt was so disagreeable to the grub that it would effectually protect the corn and cabbages. I had tried every other preventive which I could hear of, and determined to make an experiment with salt. I applied, therefore, about two table spoonful of salt to each hill of corn or cabbage, and laid it so as not to touch the stalk or plant. Not one has been molested by the worms since, though they have begun to eat the weeds in the vicinity, to which I do not make any strong objection.

I send you this statement for the benefit of farmers. From a three years subscriber.

Yours truly,

R. H. Jr.

East Bloomfield, Aug. 6, 1842.

We are much obliged to our correspondent for the above communication, and should be glad to hear from him, as he suggests we may do, on other subjects. The observations of plain practical men are of great value; and it is by the accumulation of such well established facts as these that we may arrive at the most important and practical conclusions. The application of so large a quantity as two table spoonful of salt is probably much more than would be effectual; but this can only be determined by repeated experiments. The salt in such case, beyond the destruction of the insect, is probably not lost, but its benefits may be felt in succeeding crops. As we have before said, we mean to go fully into the subject of salt as a manure at a future time—a present, however, we throw out only one or two suggestions.

Land in the vicinity of the sea, where sea-weed and sea-weed are easily obtained, are, with few exceptions, essentially benefited by the application of sea-weed, rock-weed and kelp, either simply spread upon the grass land or spread and ploughed under. Much of the benefit in these cases is supposed to be due to the salt with which these grasses are impregnated. We have often applied them with the most decided advantages. One of the best farmers of New England, living near the sea, assured us that he estimated the value of salt hay, that is, hay cut upon lands customarily flooded by the tides of the ocean, as equal to five dollars per ton as a top-dressing for his grass land. We have known, likewise, upon six acres of land, dressed chiefly and most liberally with rock-weed, gathered on the sea shore, a crop of upwards of twenty-nine tons of hay, weighed, when well cured, at the town scales, to be taken in one year; and we have been familiar for years with a field of about forty acres, annually manured with rock-weed, kelp and sea-weed, where the ordinary yield was estimated at 120 tons upon the forty acres; and as this hay was almost wholly carried to the market, there could be no essential mistake in the estimate.

These facts present the subject of experiments with salt as a manure as matter of great importance; and as the cattle in the interior, remote from the sea influences and atmosphere, require frequently this condiment or seasoning of their food to be given to them, may it not be inferred from analogy, that lands remote from the sea may be in some degree deficient in this

element of fertility, and receive an equal benefit from its application?

The use of salt as a manure is not new at all; but while it has been fully settled that a certain amount is almost invariably beneficial, any excess is directly pernicious. To determine the safe medium is greatly to be desired, and can only be ascertained by repeated experiments judiciously made; and in which all the circumstances are carefully noted.—*Ed.*

Salt for the Grub Worm.

Since sending to the press the communication of R. H. Jr., on salt as a protection against the grub worm, we have received the subjoined, confirmatory of the foregoing, which we have much pleasure in inserting, and beg that we may again and often hear from our correspondent.—*Ed.*

EXTRACT.—*London, Canada, 15th August, 1842.*

I should be glad, through your columns, to thank the individual for his article on applying salt to plants to kill the grub, (not the gentleman who recommended a table spoonful to each plant, but the one who applied it to the plants at the rate of a bushel to the acre). Previous to reading this article, I had tried several things and had planted over and over again and again, but my plants were as quickly destroyed, and I was about to give it up as a failure when your number came to hand and I saw the article on salt. I immediately put about a pinch to each plant, which I repeated a second time, and I had no more grubs. We had, however, at this time moist weather.

On mentioning this remedy to a friend, he said he could not account for a fact, which before had to him appeared a mystery. It was this, when he set out his plants (cabbage) he watered them with water from a salt-pork barrel daily, for about a fortnight, during which he had no grubs; but thinking the cabbage plants had sufficient root, he discontinued, and soon after he found the grub attack his plants as much as his neighbors. The salt in season enabled me to have cabbages in season; and should I receive no other benefit from the perusal of your N. G. Farmer than this simple cure, I shall consider my half-dollar well laid out.

X FARMER.

Rust in Wheat.—Rusted Straw for Cattle; an Inquiry.

We hear many complaints from different parts of the country of injury to the wheat from rust, and of short and imperfectly filled heads. These complaints are not extraordinary; but they are not wholly without foundation. Yet there is ample reason to think that the crop of wheat throughout the country is unusually large and fair.

The inquiry of our correspondent in relation to the effects of giving rusted straw to cattle, are very important. We request the particular attention of experienced farmers to them, and beg that we may hear from them on the subject at an early date. For ourselves, we have used it to some small extent, but always with great misgivings, though with no ascertained injurious results; in these cases, however, we never used it alone without hay; and always felt that the litter yard was a much more proper place for it than the crib.—*Ed.*

Mr. EDITOR—The wheat in Tompkins county has probably suffered more from the effects of the rust this season, than any other county in the state; consequently the produce will be considerably diminished. It is confidently believed by many that it will fall 50 per cent below an average crop.

In some sections the yield is above an average one, and the berry very plump and fine; while perhaps in districts two miles distant, the failure is only partial,—three miles, there are instances of a total failure.

As is customary with us, and with farmers in all places, many feed much of their wheat straw to their cattle; but this season, the straw is so much rusted that

some are apprehensive that disease may be produced if diseased straw is fed to them—instances being known, it is said, of its having proved fatal.

I am informed, indirectly, by Judge — of this county, that some years since, he lost all his stock, and many cattle of his neighbors also suffered much, in consequence, he believes, of feeding rusty straw.

Judge — is known among us as a man of much discernment and discrimination, and I have never known his integrity questioned. I will endeavor to prove his statement of the matter, and will forward it for publication; therefore, you need not receive it as "all talk and no cider." Do you or any of your correspondents know these things to be so; if you or they can speak affirmatively, please inform us.

CHARLIE.

Agricultural Intelligence.

THE NEW YORK STATE AGRICULTURAL SOCIETY holds its annual Show at Albany, on the 27th, 28th, 29th and 30th of September. It is designed to be a great occasion for the farmers. Two thousand dollars are to be distributed in premiums; and the competition we have no doubt, on public as well as pecuniary grounds, will be the most extensive and spirited that has ever taken place in the country. No pains will be spared to render the occasion worthy of the State. Better than all other things, it will bring together many of the most intelligent and best friends of agriculture throughout the State and the United States, on an occasion where no party and sectarian interests can disturb the festivities; where they may stimulate and assist each other in their best of all improvements; where reflecting minds will have occasion to contemplate with the highest sentiments of religious gratitude the beneficence of the Creator in his abundant provision for the sustenance and comfort of his creatures; and find stronger and stronger motives to make this provision yet more abundant, that the comforts of life may be so widely extended in our fertile and free country, that not one of his great family shall be sent empty away from the table of his infinite bounty.

The Trial of Agricultural Implements will be on Tuesday, the 27th. The General Exhibition on Wednesday and Thursday, the 28th and 29th. The public sale of stock, &c., on Friday, the 30th.

Farmers desiring to contend for the premiums are reminded that the regulations are absolute, and will be strictly adhered to.

Cattle Shows, Fairs, and Ploughing Matches.

We subjoin a notice of the times of holding the several Agricultural Fairs, which come within our knowledge, within the district where our paper principally circulates, and shall keep it in until the times arrive. We shall be obliged to the Secretaries of the different Agricultural Societies in New York, Ohio, New England and Canada, if they will give us (post paid) the notices of their respective fairs.

New York State Fair, Albany,	Sept. 28 and 29.
Monroe County " Rochester,	Oct. 13 and 14.
Ontario " " Canandaigua,	Oct. 12 and 13.
Genesee " " Batavia,	Oct. 20 and 21.
Wayne " " Palmyra,	Oct. 5 and 6.
Livingston " " Genesee,	Oct. 4 and 5.
Onondaga " " Rome,	Oct. 11 and 12.
Scheneca " " Waterloo,	Oct. 20 and 21.
Tompkins " " Ithaca,	Oct. 6 and 7.
Onondaga " " Syracuse,	Oct. 5 and 6.
Jefferson " " Watertown,	Sept. 15.
Cayuga " " Auburn,	Oct. 12 and 13.
Oswego " " Oswego,	Oct. 5.
Erie " " Buffalo,	Oct. 5th & 6th.
Chemung " " Fairport,	Oct. 19th.

CANADA.

Durham, Bowmanville, Oct. 18.

Northumberland, Grafton, Oct. 12th

Gray's Elements of Scientific and Practical Agriculture.

This compend is designed to supply a great desideratum among agriculturists. It has been compiled from all the important works on the subject which have appeared in the last few years. Its object is to exhibit the principles of agriculture, and to set before the farmer the chemical and philosophical reasons for many operations with which the practical farmer is familiar. It presents at the same time many new principles and reasons on the business of agriculture. It is the pointing up of the discoveries and elements and details of this first of arts and sciences to the present day. It is not a servile copy of any work, though it pretends to little originality. It embodies and carries out the grand principles of Liebig, perhaps the most distinguished of all the scientific agriculturists of the day. "Agriculture, say aye, is the true foundation of all trade and industry—it is the foundation of the riches of states. But a rational system of a riculture can not be formed without the application of scientific principles." The nature of soils, the influence of manures, the composition of vegetables and the laws of vegetable life, the changes produced by cultivation upon the soil, the most economical means of preserving the heart of a farm or field, and the reasons of the wasting influence of some plants and some modes of cultivation—all these need to be well understood. The great progress in this knowledge has been the result of the advancement of chemical knowledge and its application to practical agriculture. A great amount of this knowledge is contained in Mr. Gray's work, and presented in a form attractive, while it is scientific, minute and clear. The work indeed must be read and pondered; it must be studied, and made familiar. It is a dishonor cast upon agriculture, to suppose that its principles or practice are too free or simple or obvious, to require much thought, study, effort or wisdom. Where the larger works of Johnston, Liebig, &c., are not possessed by the farmer, the work of Mr. Gray will be a great addition, and not be out of place even with those.

Mr. Gray maintains, in opposition to the conclusion of Liebig, that plants do not derive all their carbon from the atmosphere through the absorption of carbonic acid gas. Mr. Gray's reasoning seems to be decisive.

It was the doctrine of chemistry thirty or more years ago, that the animal and vegetable kingdoms mutually minister to each other, and that the carbonic acid thrown by the respiration of animals, combustion, &c., into the atmosphere, was removed by the vegetable world, and that this is the grand instrument of purifying the atmosphere and continuing its purity. This is no doubt the fact. To maintain this grand principle, it is not necessary, however, to suppose that the atmosphere is the only source, though it may be a great one, of carbonic acid, the great pabulum of vegetable life.

Following great men, the author has given some particulars, utterly incomprehensible. Thus he says, p. 39, "The most correct definition of life is given by Bichet, and modified by Whewell. 'Life is the system of vital functions.' No man can attach a meaning to this definition. Does not the system, in which the vital powers acted, remain after death, till organic changes take place? Then life is not the system. Or, does he mean by 'system of vital functions,' only the totality of vital operation? Then life is life; the great wisdom in the definition. The truth is, as long ago said, we know what life does, not what life is; we define it by its operations, and not by its nature or essence, for of this we are ignorant. We are sorry to see any such philosophical abstractions. We are glad they are so few.

In some cases it is very doubtful whether the true philosophy has been given. The mistake is of little consequence, because on the right or wrong principle, the practice will be the same. Thus, the chief use of gypsum is maintained by Liebig to be in condensing ammonia or other elements, so that they may be conveyed into the plant. Now it is far more probable that a small portion of gypsum, potash, phosphate of lime, &c., is necessary for the full development of the plant. The organic elements are four, oxygen, hydrogen, carbon and nitrogen; the inorganic are, besides gypsum and the others just mentioned, silica, soda, magnesia, iron, &c. The latter are supposed to be as important as the other to the healthful and powerful action of vegetable life. To a certain extent these may be food and stimulus to vegetables. They may be far more important than to be the mere vehicles of transmitting other substances; and such a principle is far more consistent with the economy of the laws of matter.

Phosphate of lime is essential to the formation of bones in man and beast. In the growth of the young it is rapidly deposited; and in the older, it is necessary for a new deposit to replace that part of the bone which is removed on account of its being worn out. How beautiful that economy which supplies through the food the constant demand for this substance. In the mammiferous tribe, the very milk of the mother conveys this element of healthy growth and action. Small as is the quantity in any article of food, it is constantly posing in adequate supply, removed from the soil by vegetables, and by animal and vegetable substances returned to the earth, again to perform its wonderful work.

Plants take from the soil those substances which are necessary for their healthy action. In time, these must be exhausted, if the vegetable growth be removed, and if they are not returned by manures. For the growth of any one plant, the best manure must be the plant itself, because it restores the elements removed. Thus the straw of wheat would afford the best manure for wheat; the tops of potatoe, for that plant; of corn, for corn. This is the lesson taught us by providence in the natural production of plants. This doctrine is insisted on by Liebig, and maintained by Gray. It may be called the *first element* of scientific agriculture.

The second element is the adapting the plant to the kind of soil, or the kind of soil to the plant. This opens before us the broad field of science and practice in agriculture. In the examination of this field, the work of Gray will be highly interesting and useful. We cannot enter upon the details, but we trust the farmer will examine them for himself, for he cannot fail to be amply repaid. C. D.

Fermented Vegetable Manure.

A new method of making *Vegetable Manure* by Fermentation has recently been patented and brought before the agricultural public, by Mr. G. Bommer. Farmers and gardeners have an opportunity of seeing a heap of buckwheat straw under the process in the yard of Mr. Bachmeyer, 119 West Market street, in this city. Mr. B. is the agent of the patentee for this and several of the adjacent counties. By means of his method, it is said, every farmer may reduce his straw, refuse hay, corn stalks, and all other vegetable matter, to rich, unctuous manure, within 15 days, and at very little cost. The preparation is very simple and easy.

This Manure is a composition of animal, mineral, and vegetable substances, and may be made at any season. A compost may also be made with common earth, where straw and other vegetable matter is wanted, which will answer all the purposes of animal manure, and prove a superior substitute for lime, plaster, ashes, &c. The process produces nitrate of lime, potash, ammonia, and saltpetre, four of the most fertilizing properties of good manure. Among those who have tried it with success we notice the name of Mr. J. W. POINIER, of Morristown, and Mr. Pierre Grey, of Madison, whose testimony we subjoin:

"Mr. Bommer has publicly made use of our premises his Vegetable Manure. The result of his process has been entirely satisfactory to me and those of my neighbors who have witnessed the operation, and examined the product.

"The materials made use of in that experiment were straw from my barn, made into a heap on the 5th of May last, and opened a fortnight afterwards. At that time the straw was found altogether decomposed, and changed into a dark Manure, very unctuous and rich, having a strong smell of ammonia, and of good litter.

"And I hereby further certify that this Manure has been used on a field of Turnips, in which it had an excellent effect, and also in my garden, where I obtained superior vegetables, among them some pumpkins of an extraordinary size for the kind, as may be seen at my house. PIERRE GREY."

The Newark (Conn.) Gazette of the 12th inst., speaks of a successful experiment, in that place, with *Sedge*, a coarse grass which grows about the flats of the harbor, mixed with sea-weed. Those of our readers who are interested in the cultivation of the soil would doubtless be gratified to see the heap now fermenting in Mr. Bachmeyer's yard.

The cost of this method is inconsiderable. Cleared land, intended for agricultural purposes, (wood land excepted,) under 50 acres \$10; more than 50, ten cents per acre additional. On payment of this sum, the method becomes the property of the purchaser for ever.—*Newark Sentinel*.

Lightning Rods.

I wish every farmer would from this time forth, keep a register of all the accidents from lightning which he sees in the newspapers—the deaths from the striking of dwelling houses, the well filled barns laid in ashes, &c., and if he is not then protected by a rod before the summer of another year, it must be from the spirit of procrastination. What is the cost and labor of erecting one, contrasted with the feeling of security,

"When o'er heaven's rending arch the rattling thunder rolls—"

What is the cost and labor of erecting one? Four dollars—not often more. The writer lately put one up on a building 23 feet high—the whole length of the rod was 42 feet, so that 12 feet projected above the building, and it descended 7 feet into the earth. The iron cost less than two dollars—the blacksmith work was a dollar, which I thought too much; and digging the hole and erecting it cost about fifty cents; making only three and a half dollars in all. The part below the roof need not be large,—not more than five-eighths of an inch; the part above should be of three or four pieces of successive sizes from one inch to half an inch, welded together, so as to form a somewhat conical piece, to stand firmly in the wind.

The height above the roof should be one half the length of the building if placed at one end, or one quarter the length if placed in the middle. It should be continuous throughout—not *linked*—but the joints welded together; and it should descend into permanently moist earth, which is not often found at a less depth than six feet. It may be kept to its place by small pieces of plank, with holes bored through to admit the rod, and these nailed to the house so as to keep the rod several inches off.

The points, which should be several in number, may be made of small iron rods welded together, and to the rod, filed sharp, and polished. Tinning them might be an advantage. When one point only terminates the rod, it is not always sufficient to carry off silently the load from a heavily charged cloud, hence an explosion follows, which in one instance familiar to the writer, melted the point of the rod into a ball, but without any injury to the house or its inmates, though the noise of heavy artillery was a mere pop-gun to it.

If lightning ever struck a building protected by a rod made as here suggested, or according to its leading principles, I have not heard of it. Q. E. D.

REELING SILK.

The unwinding of the silken cocoon is performed upon principles of surprising simplicity, yet the popular fallacy regarding its insurmountable difficulties has accomplished more to retard the culture of silk in the United States, than any adverse cause whatever. The writer was early impressed with the prevailing prejudice, but the first ray of intelligence was sufficient to dispel it. The first attempts were sufficient to reveal the truth, that this was the simplest division of labor connected with the art of raising silk.

Before entering upon a particular description of this art, it is proper to apprise the reader of the nature of the instrument by which it is accomplished. The standard silk reel of Europe is the Piedmontese reel, and all others combine its principles, which are these. If we attach to the bars of a common reel, the fibres of several cocoons and direct the combined thread so that it shall in every revolution fall in the same place, the consequence will be that in drying, the component threads of the skein will be glued together and cannot be unwound. This is why the common domestic reel is inadmissible. The Italian reel obviates the difficulty. It is so contrived that the guides that hold and direct the thread, shall slowly vibrate, by which movement the thread is laid, not at right angles with the axis of the reel, nor upon the same place as the turn which last preceded it. The threads are laid parallel to, and at a little distance from each other, and when they have travelled over the breadth of the skein they are directly carried back again, so that each alternate course crosses the other at a sharp angle. This movement allows the thread time to dry, and by the crossing of them adhesions are effectually prevented. It is somewhat in imitation of the instinctive method of the worm which never lays the threads in parallel contact, but by a sweeping motion from side to side.

The silk reel contains two sets of guides, one for gathering the fibres of the several cocoons into a compound thread which are stationary, and the other just alluded to, for guiding the thread upon the reel, and is of course moveable. Under the first set, is a basin resting upon a furnace which heats it. The reeler sits behind this basin, and she requires an assistant to turn the reel and to perform other services in her behalf.

No other than water perfectly soft and pure will answer, and its temperature must always be below the boiling point, but generally very near it, and it must never be suffered to become foul. Before the reeler commences she must classify the cocoons, by separating the double ones into one parcel and the indifferent ones into another, collecting the excellent ones by themselves. She must be careful not to mix up parcels whose chrysalises have been destroyed by different methods, for each will require modification of temperature. She must remove the loose floss and settle in her mind the size of the thread she is to form. If it be a thread of ten fibres, it will require eight to twelve cocoons, for as they run out the filaments become smaller. If it be a thread of twenty-five fibres it will require from twenty to thirty, which is the size easiest maintained, and is about the proper size for present demand. The novice had better commence with unstuffed cocoons, for they play off with greater freedom than those containing dead chrysalises.

She takes her station, and throwing into the basin a few handfuls of cocoons, she presses them gently under the surface of the water with a brush composed of three or four sticks of broom corn, or a little bundle of fine twigs, until the ends of the filaments have become entangled with them, when she seizes them with the left hand and laying aside the brush, she draws out the threads, hand over hand, until they run free, when they should be fastened aside until all the threads are thus gathered up, and it is important that no more

come or put into the basin than are necessary for immediate purposes, for it creates confusion and waste.

She then takes a sufficient number of fibres to form two separate threads, which are at once passed through the lower guides, where they are twisted over each other twenty times, more or less, for the purpose of consolidating and rounding them and dissipating moisture, the greatest care being taken to keep each division distinct. Each combined thread is next passed through its second guide and attached to the bars of the reel. If the water be of proper temperature, the reel may be turned with a quick movement, which immediately brings out the gossamer outline of the skein, beautiful to behold.

After the reel has been turned some time, the threads will diminish in size, some of the cocoons having broken and some run out. This is prevented by constantly attaching new fibres as others become exhausted, and it must be done too without stopping the reel, by gently touching the end of a fibre to the thread just as it passes the lower guide.* This is an operation that requires some tact, but it is easily acquired. When the capsule of the chrysalis is laid bare, it must be removed with a small skimmer, and new cocoons constantly added, few at a time. Every particle of silk should be extracted from the cocoon, which is impossible if too many are playing at one time.

This is the simple line of the reeler's duty, and to perform it well she must observe some collateral directions. She must be patient and reel without waste, and that in the most finished manner without regard to quantity, for that will depend upon practice. Her progress will be slow at first, but she will inevitably acquire adroitness. The nature of the process will soon unfold itself, and she will throw aside her written directions. She will perceive that if the water be too hot the silk will come off in masses or buns, which will break the threads or injure their beauty. If it be too cold the gum of the cocoon will not be sufficiently dissolved, and it will fly up to the guides and break the thread, or leap out of the basin. If bus should be discovered upon the skein, they are to be removed by the assistant before they become dry, and it is her duty to watch the skein and the course of the threads from the guides to the bars, that every thing runs free and smooth. When the reel has been a little time at rest, the threads must be wet before starting from the guides to the basin, or the threads would lose their adhesion, and being dry would break at the guides. The skeins should not be disturbed from the reel until perfectly dry, and this is done by starting the keys in the axis of the reel.

The reeler's duty is one of constant activity, and requires quickness of motion and adroitness of touch, natural ingenuity, composure of mind and a determined spirit to succeed. She will be astonished at the result of her exertions. Understanding the principles of the art, the details will suggest themselves to her mind, and she will in a short time turn off one or two pounds of silk daily without the least difficulty. It is certainly a beautiful operation that may well engage the attention of young women, for they will find it an independent, honorable and profitable employment. J. D.

Manufacture of Silk in Ohio.

Mr. John W. Gill, of Mount Pleasant, Hamilton Co., Ohio, manufactured during the last year upwards of \$9000 worth of Silk goods. His clear profit on the capital invested was ten per cent. He has three large conneries and commenced this season to feed upwards of two millions of worms, he calculates, will yield him upwards of six hundred bushels of cocoons, worth at present prices \$2000, but much more to him, as he will manufacture the whole crop into various fabrics.

* This guide should be made of a plate of brass, by drilling a fine hole near its upper edge and sawing a slit to it, the upper extremity opening like the letter V, and made perfectly smooth.

Botany.—The Active Female Accomplishments, versus, External Show.

M. de Candolle, Professor of Botany at Geneva, while exhibiting at his lectures a very valuable collection of American plants, took occasion to say to his audience that this collection was borrowed, and must be returned by a given day, much to his regret. Some ladies present immediately offered to copy the whole collection by the aid of their friends in one week, and the task was faithfully performed. The drawings, 860 in number, filling 13 folio volumes, were executed by 114 female amateurs in less than six days. The principal part of each plant was colored, the rest traced with accuracy,—the execution was invariably good, and in some instances masterly. It is said that this taste for the arts and for knowledge in general, is universal in that city.

Once travelled on a canal boat in company with a young Swiss botanist, who was educated at Geneva; his whole soul seemed filled with the grandeur and beauty of our vegetable creation; he would often leave the boat an hour at a time to walk ahead and collect specimens of plants and flowers, these he would bring on board to arrange and press in his herbarium. We had several village young ladies, passengers, going west on a visit; they were lively girls, very expensively and tawdrily dressed; but they loved art better than nature; in fact, they had no taste for the glories of the vegetable world; hence they looked upon our foreign Botanist who could not speak English, as they would upon a wild animal whose genius was inferior to their own. But to show that his opinion of them was not more exalted, than their estimate of him; when I asked him what he felt to be the principal difference between these American young ladies, and those of his own country, he quietly replied, "*celles ci sont des poupées, celles là, des anges*," these here are dolls, there they are angels. This young man had been but two weeks in the United States, but who will say that his first impression in relation to our American young ladies was wide of the mark. He only meant to convey the idea that in his own country the intellectual pleasures are cultivated, instead of those senseless, expensive, fashionable, and demoralizing habits of external show, so universal in these United States. S. W.

Watertown, Aug., 1842.

Songs of Birds.

It is quite amusing as well as of real utility, assisting as it does the memory to distinguish the songs of various species of birds, and thus enabling the observer readily to identify them,—it is quite amusing to observe the translations into English of their various ditties. Nuttall gives on the authority of the New England boys, the following as the Bob-o-link's song: "Bob-o-link! Tom Denny! come pay me the two and sixpence you've owed me more than a year and a half ago, go, it's clear, it's clear!" A tailor observed to me that the song sparrow continued to prate round his window, "Prick your f-i-n-g-er, suck it, suck it well!" The iron-founder rendered the robin's song into "Skillet! skillet! two legs to a skillet, three legs to a skillet!" and a well known physician in Y—remarked that the same bird often gave him this admonition: "Kill 'em, kill 'em, cure 'em, cure 'em, give 'em physic, physic, physic!" Even the frog speaks English (or rather Irish) as, "Jug o' rum! jug o' rum! jug o' d-run!?" or, "Paddy got d-run, got d-run, got d-run, 'unk, 'nk!" X. Y. Z.

Tar for Wheels.

A friend informs me that the use of tar in the Eastern States for waggons and coaches is now, or soon will be entirely superseded by the introduction of boge lard and wheat flour. To prepare the mixture, the lard must be melted over a gentle fire and flour stirred in until the lard becomes of the consistence of a paste. Our friend warrants us in advising farmers and waggoneers to adopt the plan. He says they will never use tar afterwards.—*Local Standard.*



ROCHESTER, SEPTEMBER, 1842.

Agricultural Excursion in the Genesee Valley Continued.

(Account of Crops continued.)

BUCKWHEAT is raised to some extent, but largely. I could not learn that in any case it had been used as a green-dressing to be ploughed in, a process not unknown in some parts of the country, and from which I believe much benefit may be derived. The cost of the seed is a small affair; and the preference of such management over a naked fallow can hardly admit of a doubt. A few careful experiments in this case would decide an important question.

GRASSES.—The Grasses cultivated are the red-clover and Timothy or Herd Grass. The meadows or alluvions on the Genesee river abound in rich natural grasses, and are peculiarly favorable to the growth of grass.

In one or two cases, on a small scale, I found the orchard grass cultivated; but merely as an experiment; and I met with two small fields or rather patches of millet, sown probably for the same reason. The stalk was extremely large, which indicated, in my opinion, too thin sowing; certainly, if it were intended that it should be cut for hay. This is a common error. The allowance, with most farmers, of seed for a crop of millet is one peck per acre. If the land is rich, the stalk in such case becomes as large as brush; but where a bushel is sown to an acre, the stalk is small and fine, and the hay, when well cured, of the very best description. I have myself obtained three tons to an acre, weighed, after being well cured, at the public sale.

Of grasses, clover is extensively cultivated. It is sown on the wheat in the spring at the rate of 7 or 8 pounds to the acre. It is commonly depastured in the fall, and the field is allowed to continue in clover the ensuing year, and the succeeding spring is ploughed and fallowed for wheat. In other cases it is depastured in the fall of the year in which it is sowed; and in the ensuing spring the land is ploughed and fallowed for wheat.

There may be said to be three distinct kinds of clover customarily sowed by the farmers; the first is the June or Southern clover; this is comparatively small and ripens early; the next is the Northern or Vermont clover, which ripens late and grows with great luxuriance; the third is the Ohio clover, which holds a medium character between the two. I found that both for hay or for ploughing in with the stubble, farmers differed in their choice, preferring either the Southern or the Ohio clover. The Southern clover makes the best hay and is more easily cured than either of the others. The Northern clover makes a very coarse hay.

The crop in general averages from two to three tons. The opinion of many of the best practical farmers, whom I consulted, is decidedly in favor of curing it mainly by sweltering in the cock. In this case it is cut but not spread, and after lying in swarth until it becomes entirely dry from extraneous wet and slightly wilted, it is put into small cocks and suffered so to remain until it becomes *made*, which can only be determined by good judgment and experience. The cocks are then turned directly upside down, until the dampness gathered at the bottom of the cock is wholly dried off, and are then carried into the barn. I have known this same method practised by some of the best

farmers in Massachusetts, and in other parts of New York; and the hay under such circumstances retains its sweetness and color, the flowers and leaves are not shaken off and lost, as when the grass is much tossed about and spread; and the hay proves of an excellent quality.

Timothy or Herd Grass cannot be said to be cultivated extensively, though I think some of the finest fields of Herd grass which I have ever seen, I found on Mr. Le Roy's place near Avon, on the opposite side of the river. I hardly know what could be more luxuriant, even and beautiful. On the Genesee flats above in the great valley, the hay was most abundant, but as I have remarked of a more mixed character. Mr. Wadsworth is accustomed to feed or depasture some of his fields so late in the spring that the crop of grass is not fit to be cut until the season is far advanced. This divides and extends his time of haying, as the different fields ripen in succession, and his haying season reaches into September. This late-grown hay is, I presume, not so substantial and nutritious as an earlier crop would be, partaking very much of the character of roven, but this is compensated by the advantages of the feed in the spring. The practice of taking two crops does not, that I could learn, prevail here; and this I believe from an oppressive feeling of abundance rather than that it might not in many cases be done to advantage, for with respect to many of the farmers of this rich section of country, the case must be as with a farmer mentioned in another place, who needed to pull down his barns and build greater, that he might have where to bestow all his goods.

It is difficult to estimate with any great exactness the ordinary yield of these best lands in grass, but it may be safely put down as averaging over two tons per acre. I do not know where finer crops are to be found, and this would be an under estimate of some fields, which I went into.

Hay is, in many cases, stacked, sometimes near the barns and at other times in the fields. I saw but few instances in which these stacks were thatched; but in many the stacks were put up with extraordinary skill and care, and so were pretty thoroughly protected against the weather. Mr. Wadsworth has, scattered over his fields and meadows, a great many small barns in which the hay is stored; and at which places his cattle and sheep are fed in the winter, but not housed.

The proper stacking of hay is quite an art, which an Englishman or Scotchman understands well; and if allowed to take his own way will perform with so much skill, I may add, taste, that I have often admired these stacks for their effectual protection of the hay, when well thatched; and for their beauty as picturesque objects in a rural landscape. But it is an art of which in general a Yankee knows nothing, and in which he is commonly a sad bungler; and this not from any want of capacity, but from a deficiency of patience owing to the driving haste with which most things are carried on among us; and from a habit, but too common, of only half doing most things which we undertake.

Of Stock in the Genesee Valley and its vicinity, I can judge but very imperfectly. It is hardly to be considered at present as a stock raising district, the land being chiefly devoted to the growing of wheat and grass. Mr. Wadsworth feeds large numbers of cattle upon his meadows, but many of these are purchased and not bred by him. He has bred, however, some improved stock and has several animals of full and mixed blood. Mr. Le Roy and Mr. Newbold, in York, have a considerable herd of improved animals of a high character. I saw them merely in passing, and regretted that I could not go among them; but they are held in high estimation in the opinion of competent judges.

I scarcely found a farm where any considerable number of cows were kept for dairy purposes beyond the

use of the family. The cows met with general were of no particular breed; and were, as far as I observed, in good condition. Perhaps I should except from this eulogium the cows which go in the highway, a race which, in Ireland, are so much valued for their skill in leaping hedges and ditches; and at sales are always commended for their capacity of "getting their own living." I could get no exact account of any dairy product. The average yield of a good cow in new milk cheese was stated at about 300 lbs., and where her milk was devoted exclusively to butter, at 110 to 150 lbs. per annum. These statements, however, were rather conjectural than ascertained; and to all inquiries respecting the yield of their cows in milk, the stereotyped answer was always made, that they gave a *pailful* at a milking; an answer which I have always admired for its precision, especially as pails are all of one size!

The general impression among the farmers in this part of the country seemed to be, that while the Improved Durham Stock was decidedly to be preferred for its beauty, size, and thrift, yet for milk they were considered inferior to the best selected cows of our native stock. The first crosses have almost always proved well. How far this impression or opinion is to be valued, must depend on many circumstances. It may be mere prejudice or an opinion taken up at hap-hazard; and but very few persons, if any, in this part of the country have had that long and careful experience with the race, that would justify them in coming to so great a conclusion. The truth is, with a few exceptions, we in fact know little of this stock at present; and the haste with which some men approve or condemn, is well illustrated within my own experience, where, for example, an individual farmer of no mean judgment undertook to give their character with perfect decision, whose whole knowledge of them extended to the owning of a half-blood two years old bull for a few months.

If any man, however, chooses to see this stock in perfection, let him go to the farm of E. P. Prentice of Albany; and if he has any prejudices of any kind against the stock, and is not then prepared to yield every one of them, I can only say he is differently constituted from what I am. Mr. Prentice has about forty animals of the Improved Durham Short Horn, of pure blood and of the highest pedigree. He has one cow with seven heifers of her own progeny along side of her, six of which were in milk. A stock of larger size, of more symmetrical form, of equal beauty, of finer feel, of more thrift, of greater productiveness, I never have seen and never expect to see; nor do I expect to see a herd better kept, nor better arrangements for their keeping. To an amateur, to an inquisitive farmer, who desires to see what skill, intelligence and care can effect in moulding and improving the animal frame, it is worth a journey from Rochester to Albany on foot to see this stock. It is worth almost as much to see Mr. Prentice's stable arrangements and the tidy manner in which every thing is kept. Some few farmers among my acquaintance, in going there, would hardly know that they were not in their own best parlors. This, however, seems to convey a slight reflection upon some farmers' wives; but that is not my intention; and as I would not upon any account be disrespectful towards the ladies, I beg my readers to draw black lines around this paragraph and consider it as "expunged."

I have only to desire that Mr. Prentice would by a lactometer ascertain the qualities of his milk; and then that he would ascertain the actual yield in butter of several of his animals for a week or so; and when this is done, that he would show his benevolent countenance in the New Genesee Farmer and let our readers know all about it. Our friend Tucker of the Cultivator, has too much generosity to complain of this; or to think we have jumped over the fence into his pasture

with a view to catch and bridle one of his best colts. He has a full team always in his own stables.

The farm work in this part of the state is performed almost exclusively by horses. The horses in general are horses of all work. No horses among us are raised for the turf, and the various vehicles in use, wagons, deerhorns, buggies, sulkies, &c., have put saddles almost wholly out of use. This is to be regretted, for there is no more manly, healthy, and vigorous exercise, for man or woman, than riding on horseback. The horses in general are of a medium size, and impressed me favorably.

Of the comparative expediency of keeping horses rather than oxen, or otherwise, I shall not speak in this place. Confidently as some persons have decided in this case for themselves, there are yet two sides to the question. A pair of horses is required on almost every farm for market, church, visiting and business from home; but if the team must be extended beyond this, it is well worth considering whether oxen may not be kept to more advantage than horses. We shall now give no opinion in the case, but suggest it for farther inquiry.

OF SHEEP I saw some flocks, but not many large ones. Mr. Wadsworth has several thousand; the Shakers at Groveland have a considerable flock; The-ron Brown of Wheatland, has a flock of 500 sheep of mixed blood. His wool brought this year 28 cts. per lb., last year 35 cts.; the previous year 44 cts. The average yield of this flock, where there was a large proportion of wethers, was 3 lbs. 4 oz. of washed wool to each sheep.

In his opinion, 7 sheep require a ton of hay for wintering. Hay is valued at 5 dollars per ton. The annual increase of the flock is reckoned at 25 per cent. The value of mutton here is very little, and that increase will do little more than keep the flock good. Giving, however, the flock the advantage of all the increase, the account may be thus stated:

Wool, 3 1-4 lbs. at 28c.	91 cents.
Lamb, 1 in 4 or 1-4lb.	25 "
	116
Keeping 1-7 of 500,	71 cents.
Pasturage, say	40 "
	111

Net balance in favor of sheep, 5 cents.

This presents no great encouragement to the sheep husbandry. Mr. Brown is of opinion that swine and cattle are not worth raising beyond the wants of the family. I give it as the opinion expressed by him and some other farmers to me, but as a matter in my own judgment admitting of several qualifications. It is a complex question, in which a good many elements are involved, and my very imperfect knowledge in this case does not authorize me to pronounce with decision.

The value of land is rated here at 50 dollars per acre. The yield of hay estimated at 1 1-3 tons. The hay at the above estimate would be equal to \$7.50, and the expense of getting can hardly be less than \$2.50 per acre, leaving 5 dollars income in favor of the land. But on a farm it must be considered that there is much land in wood or in fallow, or otherwise unproductive; and there are uncertainties attending all crops and seasons.

I regret the necessity of leaving my journal in this case unfinished; but without occupying more of the columns of the Farmer with my own lucubrations than I am willing to do, I must postpone several miscellaneous notes to another number.

To Friends and Correspondents.

We have the pleasure of acknowledging the receipt from William Turner, gardener to Nath. W. Howell

in Canandaigua, a parcel of gooseberries of the finest description in size and quality. They might any where challenge competition; and they show how much may be done by care, pains-taking and skill. "I can't do it, I can't do it, I always have had luck." This is the stereotyped cry of the Do-little family; a very numerous progeny and a very ancient race, who were born in the afternoon and never yet quite got their eyes open nor their shoes up to the heel. We are happy to recognise one of a different race, who has found out that gooseberries will not always mildew.

Messrs. Elwanger and Barry have favored us with a splendid specimen of the Bolmar Washington Plum, quite as large as hen's eggs, and with some bouquets of exquisite beauty. We have transferred the plums to fair mouths, whose tints are ruddier and perfume sweeter even than that of the richest nectarine; and the bouquets to fair hands, or rather may we not say to flowers even more fair, one of which is as much, even in this land of monopolies, as any one of us poor sinners dares appropriate to himself, though of this bright order we are compelled to say

"Full many a flower is born to blush unseen
And waste its sweetness on the desert air."

We should like to say more, but there is somebody looking over our shoulder.

GARGET.—A correspondent inquires, what is Garget? It is a root or plant well known among us, and commonly called Poke, having a reddish stem, broad pointed leaves, and bearing large clusters of black berries. Its botanical name is *Phytolacca decandra*.

J. E. T.—A friend remarks in a letter to us: "I have read the articles of J. E. T. twice over. Such a correspondent is invaluable." We entirely agree with him and regret that the pressure of business engagements deprives us this month of his usual welcome contributions.

BERKSHIRE FARMER.—We have received the first number of the *Berkshire Farmer*, which, having been abstracted from us, we request our friend the Editor to send us another. We had only time to see that it is a monthly agricultural paper of 8 folio pages, published at Pittsfield, Berkshire Co., Mass.; and well printed, at 50 cents per year. It is to be edited by Wm. Bacon of Richmond, whose communications in the *New Geneva Farmer*, the *New England Farmer*, and the *Northern Light*, over his initials and dated at Mount Osceola, have been always welcome to our readers. We promise those who choose to take the *Berkshire Farmer* under his care, that it will be instructive, useful, safe, piquant and agreeable. Its editor is worthy of respect for his talents and acquirements; and regard and esteem for his refined taste and his excellent moral qualities. We part with him as a correspondent with unfeigned regret, and welcome him with an equal pleasure to the editorial fraternity.

THE FARM HOUSE OF THE XIXth CENTURY.—This publication has just appeared from the press of S. S. Haskell, No. 138 Fulton street, New York. It is a translation of the celebrated French work, an *Encyclopedia of Agriculture, Maison Rustique*, in four closely printed 8 vo. volumes, by Elizur Wright, Jr.; and is to be published in semi-monthly numbers of 48 pages each, in forty numbers, and at 25 cent each.

The Translator is perfectly competent to the task and promises to add some notes, which may better adapt the work to the wants of American Farmers. We have known and owned the work in French for some time. It is a complete work and highly valuable to the Farmers. What the French do in this way they do most thoroughly. We hope all the intelligent farmers in the country will seek to possess it; and we shall from time to time, as the numbers are sent to us, give some account of their contents. It will be embellished with 2000 engravings, and we trust it is not too late to express the hope that the public patronage will

be such as to allow it to be printed on better paper and with a fairer type than that in which the first number appears.

Several valuable communications already in type are necessarily laid over. The valuable communications from J. D. in Monroe, Michigan, are just received, but too late for any farther notice in this number.

The following description of the visit of our friend to the Elysian Fields, really makes our mouth water. We have no doubt it is every word true, graphic and imaginative as it may seem to any; and we only regret that we could not ourselves have accepted the polite invitation of the principal of this Academy to attend on this interesting occasion. But how we ever got our friend back from this Paradise we know not, unless he was driven out for looking, it may be, too wishfully at some of the forbidden fruit; and how he should ever dream, old and rusty as we are, that we could have an ear for this celestial music, is beyond our imagination. "O! the days of anld lang syne." But we mean to go so far this autumn as at least to peep into this Eden; and if our friend Flora, we believe the privileged resident of this charming vicinity, will condescend to give us her particular *locale* we mean to let her know in person how sincerely we respect her talents and sentiments and desire a nearer acquaintance. Here we are treading again upon dangerous ground, a sort of volcanic region, full of combustible matter, and therefore stop.—Ed.

Aurora.—Cayuga Academy:

MR. EDITOR—I spent two days the past week at Aurora, during the public examination of pupils of this Academy. Let me advise you to visit this charming place; sail on the beautiful lake and feast your eyes on the unrivalled scenery; then luxuriate among the highly cultivated fields, verdant lawns and shady groves; taste the delicious fruit, hanging in profuse abundance in the orchards and gardens; observe the beautiful flowers and clustering vines surrounding the tasteful dwellings; partake of the generous hospitality of the intelligent and wealthy inhabitants, and (*tout beau!*) listen to the sweet music or sprightly conversation of the beautiful and accomplished ladies—and you will agree with me, that Aurora is indeed a charming place. But this is a digression.—

The Academy is the oldest institution of the kind in this part of the country, having been in successful operation for nearly half a century. Some of the ablest men in the state, were, in early life, participants of its advantages. It has permanent funds, which essentially increase the facilities of education. A full board of qualified and faithful teachers are employed, and the apparatus and library are excellent. The course of education deserves especial commendation, for giving a thorough knowledge of the English language. This department is under the personal charge of that well known philologist, SALEM TOWS, author of 'Town's Analysis,' and other valuable works. Mr. Cooper, the Principal, appears well qualified for his situation; and much credit is due to Dr. Thompson, teacher of Botany and Chemistry, also to the Rev. C. N. Matton, lecturer on Mental and Moral Philosophy. The catalogue of pupils for the past year numbers 138 males and 70 females—total, 208. The examination occupied three days, and was highly creditable to both teachers and pupils. An excellent address was delivered at the close by GEN. J. A. DIX of Albany. M. B. B.

Rochester, Aug. 18th, 1842.

To Preserve Flowers.—Be careful not to press the flowers too hard at first, and change the blotting paper frequently to absorb the moisture, increasing the pressure as the flower dries.—Eng. Pub.

Importance of the Education and Training of the Young.

In that model of a good newspaper, or what in our humble opinion a newspaper should be, the Boston Daily Advertiser or Weekly Chronicle and Patriot, we find some extracts from Horace Mann's Oration, delivered in Boston on the last 4th July. Mr. Mann is the devoted, enlightened, and most efficient Secretary of the Board of Education in Massachusetts. To him the State owes a debt, which no money can ever repay; he has broken up ground, which had lain long inert and barren, and cultivated and enriched and made it productive; and sowed seeds in drills and broadcast over the land, which will continue to bear precious fruit for centuries and ages to come. High as we estimate our own art, and in some respects in importance it yields to few others, yet what is any system of agriculture compared with that moral husbandry by which the seeds of virtue are to be quickened into life and souls are to be trained for immortality?

We labor in our humble sphere that the earth may be made productive for the comfortable subsistence, and be embellished and beautified for the enjoyment and delight of man; but what are its richest fruits or its brightest ornaments compared with the adornments of the intellectual nature, and the moral fruits of the heart and mind? We aim to give the finishing bread, and to cause the earth to yield to industry and skill those supplies which God designed that industry and skill should command; and without our art and our efforts, all other arts and all other efforts won't the vain. We hold, likewise, that the success and improvement of the great art which we profess, are eminently the work of true philanthropy; and have, in various ways and forms, a serious connexion with man's moral welfare. But we are not vain nor simple enough to place any merely worldly acquisition, any physical improvement or advantage, in comparison with the blessings of high intellect in its connexion with high moral culture; the bread which feeds and sustains our animal nature, in comparison with the true bread of life, wisdom, virtue and piety; the elements of the immortal soul.

Mr. Mann's views on the subject of the infinite importance of this intellectual and moral training, are most admirable. We expected from him in this case as much as we could have expected from any man, and he has acquitted himself, so far as these extracts go, as well as any man living could have done. In beauty, in power, in true eloquence, above all in their fearful seriousness and solemnity, we do not know when they have been surpassed.—*Ed.*

"O! better, far better, that the atheist and the blasphemer, and he who, since the last setting sun, has dyed his hands in paricide, or his soul in sacrilege, should challenge equal political power with the wisest and the best, that these blind Samsons, in their wantonness of their gigantic strength, should tear down the pillars of the Republic, than that the great lesson which Heaven, for six thousand years, has been teaching to the world, should be lost upon it;—the lesson that the intellectual and moral nature of man is the one thing precious in the sight of God; and therefore, that until this nature is cultivated, and enlightened, and purified, neither opulence nor power, nor learning nor genius, nor domestic sanctity, nor the holiness of God's altars, can ever be safe. Until the immortal and god-like capacities of every being that comes into the world are deemed more worthy, are watched more tenderly, than any other thing, no dynasty of men, or form of government, can stand, or shall stand, upon the face of the earth; and the force or the fraud which would seek to uphold them, shall be but "as fetters of flax to bind the flame."

"Let those, then, whose wealth is lost or jeoparded, by fraud or misgovernment; let those who quiver with apprehension for the fate of all they hold dear; let those who behold and lament the desecration of all that is holy; let rulers whose counsels are perplexed, whose plans are baffled, whose laws defied or evaded;

let them all know, that whatever they do for God, for the great and glorious God of the night, and heaven and angelic childhood.

"Remember, then, the child whose voice first rises, to-day, before that voice shall whisper sedition in secret, or thunder treason at the head of an armed band. Remember the child whose hand, to-day, first lifts its tiny thumb, before that hand shall scatter fire-brands, arrows and death. Remember those sportive groups of youth, in whose halcyon bosoms there sleeps an ocean, as yet scarcely ruffled by the passions, which soon shall heave it up with the tempest's strength. Remember, that whatever station in life you may fill, these mortals,—these immortals, are your care. Devote, expend, consecrate yourselves to the holy work of their improvement. Pour out light and truth, as God pours sunshine and rain. No longer seek knowledge as the luxury of a few, but dispense it amongst all as the bread of life. Learn only how the ignorant may learn: how the innocent may be preserved; the vicious reclaimed. Call down the astronomer from the skies; call up the geologist from his subterranean caverns; summon, if need be, the mightiest intellects from the Council Chamber of the nation; enter cloistered halls, where the ascetic monk over superfluous annotations; dissolve conclave and synod, where subtle polemics are vainly discussing their barren dogmas;—collect whatever of talent, or erudition, or eloquence, or authority, the broad land can supply, and go forth, and TEACH THIS PEOPLE. For, in the name of the living God, it must be proclaimed, that licentiousness shall be the liberty; and violence and chicanery shall be the law; and superstition and craft shall be the religion; and the self-destructive indulgence of all sensual and unwholesome passions, shall be the only happiness of that people who neglect the education of their children."

Miscellaneous Matters.—Chance of Plants.—The Cut Worm.—The Pea Bug.—The Curculio.—The Spider.—Flies Eating Woolen Yarn.—Summer Potatoes.—Murrain in Cattle.—Wheat and Chess.—Horn Ail.

We publish the subjoined letter with much pleasure. We cannot endorse all the opinions and assertions of our correspondent, and are not willing to oppose them. It is delightful to see these workings of an inquisitive and observing mind; and the letter is of great value, if it did no more than present so striking an example of intelligent and exact observation. The difference between living in the country or travelling through the world with our eyes open or our eyes shut, is beautifully illustrated by such an example.—*Ed.*

Mr. ENRON.—Perhaps you may think it strange to hear from a friend in Ohio. I have taken your paper ever since you commenced the New Genesee Farmer, but I do not recollect of seeing anything shewing the manner in which seeds of vegetables mix or amalgamate with others of their own species. On almost all kinds of plants and trees there are false and bearing blossoms, which might be termed male and female, on the same tree or plant. The dust or flour which these blossoms contain, is necessary to form the seed; now if this flour is taken from the male blossom of its own plant or tree, it will produce genuine seed, but if it is taken from another individual of its own species, it will produce mixed seed; hence the reason why apple seeds do not produce trees bearing fruit of their own quality; but the quality of the fruit is not changed, it being the covering of the seed. I have broken open a squash and taken out seeds to plant, when, to my utter astonishment, they produced half pumpkin and half squash, good for nothing for either, except one vine, which produced its original variety. The question may properly be asked, what agent conveys seed from one plant to another? I answer it is the bees, and all other insects that delight to visit the flowers of summer, carrying with them the dust which forms the seed. All kinds of potatoes may be planted together in one field without mixing, so with all kinds of beets and turnips. A white man and negro may as easily mix by working in one field together, as those plants can by growing together; the

only time of amalgamation being when in the blossom. I must dismiss this subject for able hands to finish.

Will you accept some hints on the natural history of some of our formidable insects.

The Cut Worm or Black Grub.

This worm is produced from an egg, generally in the month of May, and grows rapidly, shedding its skin several times, until it comes into the chrysalis state. It remains in this torpid state from 8 to 12 days, depending on the temperature of the weather, from whence it comes forth the perfect miller or moth, resembling the bee moth, though a little larger and of a darker color. Its time of perfection is generally from the first of July to the middle; its food consists of all kinds of vegetables and green roots; it commits its depredations in the night while in the worm state; it goes through with the same operations that the silk worm does, except spinning. The millers deposit their eggs in the ground in autumn, where they remain during winter.

The Pea Bug.

So well acquainted are most persons with this insect, that it needs no description, but the way it gets into the pea is not generally known. The egg is deposited on the outside of the pod; it is of a yellowish color, resembling that of the horse bee, though not quite so large; it adheres to the pod opposite to the pea on each side, when it hatches and bores its way through the pod into the pea, where it is transformed into a bug, and remains there until the next spring, when it comes out and flies about and waits for the pea to grow.

The Curculio.

The insect or bug that destroys plums and cherries, resembles the pea bug in size and color, except the head, which is very long and slender and armed with sharp teeth or a point, with which it perforates the skin in a circular form and deposits the egg, which hatches and bores its way to the stone, which immediately causes it to perish and fall off; this insect can fly. I suppose it is what is called the curculio, though I have not seen it fully described. When this insect is held between your thumb and finger it will make a squeaking noise.

The Spider.

This insect is a friend to agriculture, although it is considered to be disgusting and poisonous, and many therefore that will start back and scream at the sight of a spider, as if it were a venomous reptile. This is because tradition and superstition have got possession of our senses. I have been bit by spiders and received no more injury than from a flea; yet there may be some spiders whose bite is poisonous. The spider has eight legs and eight eyes; it sheds its skin several times in the course of its life; it sometimes survives the winter in a torpid state; it is, like other beasts of prey, capable of enduring hunger a long time; its food consists wholly of flies and insects, which otherwise would devour our crops. Look at the multitude of webs in the morning after the fog has left the air, and you will see your field nearly covered, and all of these little nets are set to catch insects. How many thousands are daily destroyed. Yet prejudice has got such hold of our minds that we frequently step aside to crush them and destroy their nests. Whoever is guilty of doing so, is not acquainted with the history of the spider, or they act against their own best interest.

Flies Eating Woolen Yarn.

We often hear our women say the flies have eaten our yarn; but this is not correct. I will clear the flies of this mischief for the good reason that they have no teeth. The insect that does this mischief is a little miller or moth, which deposits its eggs in the

of cloth, which there is no difficulty in procuring, and which is made of yarn or wool and forms itself a cell of the same material, and then changes into the crystalline state, from which it comes out a perfect murrain.

How to dig Potatoes for Summer Use.

Look round your potato hills and where you see ground is cracked there you will find a potato; dig it out carefully with your fingers without disturbing the roots, and place back the dirt carefully, so on until you have enough for a meal. If this is properly done, there will be no leep potatoes to dig before fall. It operates just like picking cucumbers; you will set more if they have not got their growth, the tops will not die until they have brought in to maturity.

Murrain in Cattle.

This dreadful disease in cattle is sometimes caused by leeches or bloodsuckers. The cattle swallow them when small in drinking from brooks and marshes. As they eat their way through the stomach into the liver, it causes it to ulcerate. They sometimes eat their way into some large blood vessels in the liver, which causes the animal to bleed to death immediately.

Some may feel disposed to dispute the above statement, but I can bring living witnesses that have in them out of the livers of cattle and put them in a jar of water, and they would crawl just as they do in brooks. Cattle kept in swampy pastures are apt to die with the murrain than those kept in pastures. I understand that cattle from Ohio do well so well in the eastern markets as those from other states, on account of their health. Perhaps there are other causes of the murrain not known to me.

I think I have let down one bar at the end of a long which leads to the field of discussion, and I leave you or some of your able correspondents will enter in and give the matter a fair examination.

Wheat turns to Chess.

It has been stated by some that oats that live through the winter turn to chess, and chess, if sown, produce chess; so here we have three ways to produce chess and but a part of one way to produce wheat. It is no more absurd than to think that the weather affects the growth of vegetables.

Horn Ail in Cattle; Inquiry.

Does cutting off the end of the tail prevent this complaint, or is nature imperfect? Tell who can.

Yours, respectfully,

GAUIS KING.

Camden, Gauga Co., O., 1842.

Conditions at Ploughing Matches.

We have delayed the publication of the subjoined until now, believing it would be more seasonable and attract more attention as the Fair and Ploughing Matches approached, than if given earlier. Its suggestions are all well founded. It is fully to insist on such exhibitions and competitions without prescribing exact rules, and without making those rules absolute and inflexible.

As to premium in ploughing matches should ever be upon hurrying the work faster than at a rate at which the team could work comfortably through the furrow.

A ploughing match is not a race, nor a match at time. The depth of ploughing, the width of furrow slice, and the angle which it is laid, or whether to be laid flat or completely shut in or lapped, shall all be matters particularly prescribed. So also the time of entering, the time for calling the team and the time of starting, should be named and fully and absolutely observed. There is no end to evils which come in all such cases, from a relaxation of the rules, or from any extraordinary indulgence.

As said you cannot make farmers come up and adhere to such rules. Then we would give up the com-

petition. But this would be no difficulty in any case, provided it is understood that all the conditions are absolute, and that the committee will do their duty without fear or favor. In accommodation coaches, how few persons will be found ready at any precise moment for starting; in rail-road and steam-boat conveyances, where the precise minute for starting is fixed and where no grace is ever allowed, not one person in thousands is ever out of season. There is no difficulty in such cases in compelling people to be exact and punctual, and the advantages of such exactness in every department of life are infinite.—Ed.

MR. EDITOR—I feel desirous, at the approach of spring, to offer a few remarks on a subject, which I was glad to observe brought under your notice by your scientific and practical correspondent, Mr. Adams of Bloomfield, in your January number. I allude to the subject of ploughing,—a work of all others of paramount importance to the farmer. Considering the acknowledged importance of this primary department of agriculture, it seems surprising that so little progress has been made in it. I can only account for this on the principle that Agricultural Societies in America, without prescribing fixed dimensions, or attaching sufficient importance to the excellence of the ploughing, have awarded the premium for good ploughing to the competitor who skims over the ground in the shortest space of time, of which we had lately a notable instance in the neighboring county of Wayne.

While this country, in the arts and sciences generally, is keeping pace with the nations of the world, and in many instances going ahead of other countries, it is to be regretted that our farmers, laying aside the prejudices of the past, will not venture upon a style of ploughing more conducive to their real interests than the hurried, superficial mode now so much in vogue. We still hope, however, to see in future Ploughing Matches Mr. Adams' suggestion adopted,—that the dimensions of 8 inches in width, and 5 in depth, be prescribed, and that the time of performance shall be specified—say an hour and a half to the quarter of an acre. The judges ought then to award prizes to those who shall most strictly attend to the directions given, paying due regard at the same time to the furrows being straight, and laid at the proper angle, somewhere about 45 degrees.

The excellence of the ploughing, and not the speed at which it is performed, being thus made the subject of emulation, we might then hope for a general improvement in the art of ploughing.

Care should also be taken, as Mr. Adams suggests, that a piece of ground suitable for the trial of skill be selected; but until a proper method of ploughing be encouraged by agricultural associations, (as suggested in the hints I have given above,) no farmer would be willing to have his ground mangled and scratched in the manner we have witnessed at some recent exhibitions.

Yours, respectfully,

A CANANDAIGUA FARMER.

Canandaigua, February, 1842.

Western Prospects.—Illinois.

MR. COLMAN—Though wholly unused to writing public communications, yet I send you this hoping that a true, unpolished account of the prospects and doings of those living in what was once termed the "Far West," may be of interest to some of your numerous readers.

We are now in the midst of an abundant harvest. The wheat crop is very heavy, of the finest berry I ever saw. Oats, barley, and indeed all small grains, promise a rich reward to the Western Pioneer.

The corn crop is somewhat retarded in consequence of cold, wet weather in the months of May and June,

but should the fall season be favorable, there will be an average crop.

There are great inducements here for the emigrant. Improved farming can be had at about their first cost. Many noble situations are yet "unclaimed," with plenty of timber and excellent prairie adjoining,—the expense of the first ploughing or "breaking" is from two to three dollars per acre.

But although the soil is exceedingly well adapted to all kinds of grain, I think the Western farmer will eventually find it to his advantage to pay his greatest attention to raising stock, particularly sheep. When we take into consideration the low price of land, the short, mild winters, and the small expense of transporting wool, I think that the western farmer can raise it for one third or one half less than the New Englander. Common sheep are readily purchased at from two to three dollars; they grow large and thrive well on our prairies.

We are much in want of good breeds of stock of all kinds. Farmers are waking up in regard to the necessity of improved stock. They are purchasing some good Durham cattle, and we have a few fine Berkshire hogs.

We have some good nurseries, and some fine young orchards just commencing to bear fruit. Here I would inquire whether the wheat crop is injurious to young apple trees? I planted an orchard two years ago, and sowed the ground with wheat the same fall. Many of my trees died, the remainder look unhealthy, while my neighbor's orchard looks fine and healthy; his trees having been obtained from the same nursery and planted the same time, and on the same kind of soil. I have a few peach trees from the seed, planted two years last April, that now have peaches on them.

Building materials are cheap on the Mississippi River. Good pine lumber can be had at almost any landing at from ten to twelve dollars per thousand feet. Shingles from two and a half to three dollars per thousand.

Should you think this or any part of it worthy a place in your valuable paper, you may hear from me again.

J. A. S.

Albany, Whiteside Co., Ill., July 19.

From the Maine Farmer.

Prevention of Smut.

I have for the sixteen years last past, with complete success practised the following method, viz: Washed the seed wheat and drained off the imbibed water through a common basket. In this moist condition put it into a tight tub, long box, or trough; and for every bushel so prepared, dissolve two ounces of the blue vitriol in warm water, turned it into the wheat, and with a shovel stirred it so that the liquid should penetrate the whole mass. This may be ascertained by the color. The wheat will assume a greenish cast, where the liquor has come in contact with it.

This method of preparing our seed has become almost universal in this neighborhood, and we hear nothing of smut except from a distance.

OLIVER CROSBY.

Postage and Fines.

Some remarks have been made in a former number of the Farmer in relation to writing on the margin of newspapers, and in defence of the course of the postmaster general in fining individuals for merely writing their names or compliments. The object of the post-office department is the accommodation and not the annoyance of THE PEOPLE; and when its officers go further than this in restrictive power, they become tyrants. Writing on newspapers to evade the payment of letter postage, is defrauding the government, and should not be allowed; but no man would ever write a letter merely to say "A. B.'s compliments to C. D.," consequently fining a man for writing it on a paper, must be regarded as a wanton exercise of arbitrary power. How much more so then, to make him pay five dollars for merely putting his initials on the paper, which cannot in any possible way defraud the department.

JUSTICE.

Intellectual Culture.

Feeling somewhat gratified with the flattering notice bestowed on my former communications, and not willing to appear indifferent to, or negligent in returning a compliment, or in endeavoring to repay a "good turn," I have resumed my pen; not, however, without the conviction that many, very many, mothers and daughters of the surrounding country, enjoying superior advantages, both of acquired and natural abilities, are far more capable of enlisting the attention of the heedless and casual reader, and of inspiring the minds of the too busy-workers with a love for intellectual culture and general improvement. Yet I do not feel unwilling to render my "mite" in a cause replete with interest, to the farmer as well as the statesman, to the farmer's children as well as the collegiate student.

The first most natural duty of man, appears to be, to provide for the body sustenance and raiment. Our appetite prompts us to satisfy its cravings for food, our pride and ambition and the sense of heat and cold induce us to provide clothing; but often, through too much care and anxiety for these, the appetite of the mind becomes weak and unhealthy; its perceptions and energies are blunted; its longings for knowledge and inquiry into the wonderful operations of animated existence and inanimate matter are suspended, and finally almost extinguished, until some whispings of conscience penetrate the ear of the soul, or some thunderbolt of omnipotent power startles anew into existence the hushed and neglected spirit, the crushed and abused intellect, the intelligent soul, which has been entrusted to our keeping.

The enquiring mind cannot be satisfied and can never be stilled. It is boundless in its desires, and encroaching in its efforts. It is capable of infinite expansion and endless duration; but dependent upon the will and judgment of its possessor for a proper cultivation to bring it forth in its native strength and majesty, in its purity and dignity, in its beauty and loveliness.

My feelings upon this subject induce me to address myself mostly to the fathers and mothers employed in the busy occupations of agriculture. Although I have not the experience of mature age, yet I hope the years employed have not been altogether unimproved; and while I would speak with the utmost deference to those older and more experienced than myself, I would solicit their attention to a subject involving the deepest interests of every individual. All acquainted with the history of the farming population of our country, are aware that they have had, what is generally termed, rather hard times to get through the world with credit and honor, and secure to their posterity a competence, an independent station in society. They have, as a general thing, commenced life, not in affluence and ease, but with a few hundreds of dollars, and many with nothing but health and a vigorous determination to lay

themselves a foundation of wealth and its advantages. With little or no education, and few opportunities for improving it, with few clothes and no money, how many of our forefathers have commenced the cultivation of the wild and cheerless forest; hardly giving themselves nature's just repose, so intent were they on acquiring by the labor of their own hands, a support—yea, more—a comfortable, cheerful home for their children.

But while they labored to secure for their families the necessities of life, they seem almost to have forgotten that the mind, the foundation of all rational and exalted enjoyment, had been committed to their united care for direction and improvement. Amidst the bustle of business, the fatigue of labor, and the anxieties, cares, and perplexities of life, the cultivation of the mind has been too much neglected; and the false and injudicious opinion that the farmers had no use for much education, that there is nothing in his pursuits to draw forth the intellectual spirit within him, and that

it is of no farther importance to him than it affords facilities for the accomplishment of business, to advance his wealth and influence, has by degrees, detached, in a great measure, from his noble and generous heart, the purest sources of human enjoyment. That part of the subject has been too willingly relinquished to the nothing-to-do and professional classes. But it ought not, it must not be thus.

Upon the father, as the head of the family circle, devolves the duty of establishing a course of regular instruction at the fireside; and the mother should be diligent and unwearied in her efforts to have those regulations observed and adhered to. But, says the busy farmer, what time have I for instructing my children. Let them go to school in the winter, and if they do not learn it is their own fault. But fathers! reflect one moment. Your children's characters are molded by your own hand; and their present and eternal happiness may almost with truth, be said to rest upon your conduct. Let the father set the example—let him, in conversation, by reading and study, impress upon the youthful minds of his children the necessity, the advantages, the happiness, and the duty of intellectual culture; let him but succeed in the single effort of inculcating a love for reading, and then select such books as will both enliven the imagination and enlighten the understanding; that will raise the ambition and create a thirst for improvement; that will awaken the curiosity and induce meditation; that will fire the soul with courage, animation and perseverance; that will establish a love for virtue, religion and justice; and you will have little trouble to keep that child in the path of rectitude, in the road to knowledge, in the straight and narrow way that leads to happiness here and infinite enjoyment hereafter.

But says one, I have no leisure for reading anything more than my political and agricultural paper—I can scarcely spend time for that—and as for buying books for my children, I have no money to spare,—there are other things that must be attended to for all that. But what is it that must be attended to? a few more acres of land purchased? a fine span of horses and a few more cows? Or perhaps these things are already purchased and the money must be made out. Well, I am glad for one that you can have these things; I am heartily rejoiced to see the hard working man enjoy the fruits of his industry and economy. But—that little conjunction, but, has got a word to say—does the father, the lawful possessor of a rich and productive farm, the honest and rightful owner of fine horses and sleek cattle, of numerous herds and flocks of every kind, will he say, I cannot afford time to read anything but a paper or two? that I cannot afford a few shillings or dollars to purchase books for my family? Does he fancy that the all-wise, bountiful, benevolent father, the author, creator and preserver of himself, his family, and his possessions, will, at that great and awful tribunal, say unto him, "thou good and faithful servant, enter thou into the joy of thy Lord?" Think you that he will believe that you had no time to devote to the improvement of the mind; that you had no time or talents for the instruction of your children; no money to purchase for them the written volumes of information and knowledge? Ah! there is little doubt, there is but one conviction as to that final opinion, that eternal decision.

FLORA.

Brutus, Cayuga Co., August 7, 1842.

For the New Genessee Farmer,

On Threshing Machines.

MR. COLMAN—I noticed in your July number of the Farmer, what you say as well as what number of your correspondent say in regard to threshing machines. If you have no objections, I would like to have my say on the same subject.

In the first place, with all due deference, I dissent entirely with you and your correspondent Y, in regard

to this "partnership" or "company concern;" for the simple reason, that it is not often that two or three farmers can be found that are equally careful and particular in the use of machinery; and without careful attention, the best and strongest will sometimes break or get out of order. I will state a case in point, and I have no doubt there are many others of the same stamp.

About six or seven years ago, four of my neighbors purchased in company one of Fox and Borland's machines. The first year, each one threshed out the crops, and all went very smoothly. Two out of the four were careful men, and when in their possession all was right. But mark the difference; the four partners, after using the machine, neglected to remove it under cover, and left it at the back side of his barn exposed to the weather, until it was wanted again the next season. When another of the owners was desirous of threshing out some rye, he sent for the machine, which was three miles off, and after considerable time had been consumed in cleaning, oiling, &c. every thing prepared, the horses hitched on, the machine started, when lo, and behold! one of the iron wheels was found to be broken, and instead of three men, the hands were discharged, and he was obliged to send to a machinist to have it replaced, which to several days; and the consequence was, the flail had to be used to thresh for immediate use, and a proposition was made to sell out and close the concern. "What is every one's business is no one's business of course the machine must suffer."

Now, sir, I raise but little grain of any kind, and find it a slow operation to beat it out with the flail besides there is considerable waste, in its not being threshed clean; to be sure, the cattle will not do it any the less on that account, but to say the least is a slow and tedious operation.

This reminds me of the Dutchman who was asked why it was that his horses were always so fat, which he honestly replied, "I don't know, for I give them nothing but straw, and that is not half threshed. It is presumed he used the flail, or what is more common with them, beat out the grain with his horse feet."

The machine made at Hillsdale is, I believe, Allen patent, and a very efficient one it is too; and the price for which it is sold, is a consideration not overlooked in the present depressed state of the times.

My objection to Hibbard's machine is, that it takes up too much room—cannot be worked in storm weather—too much time consumed in preparation—requires a driver, and from the description, too complicated. I concur in opinion with your correspondent Y, that a two-horse power is preferable, as it costs more, and can be worked by one horse if required. An endless-chain power can be placed on a barn floor—takes up little room—can be removed from one barn to another and put in operation in a few moments.

One object in addressing you this communication is to answer the inquiries contained in several lately received on the subject, and whether "Hap power and threshor hold the same place in my eye as it did when I recommended it to the notice of farmers, in the third volume of the Cultivator 1837."

As I observed before, I cultivate but little grain, from 900 to 700 bushels of all kinds; still I consider a threshing machine necessary, and procured 1836 one of "Hale's Endless-chain Power Threshers," which I have used ever since, for thrashing, sawing and grinding; and what is very extraordinary, no accident has occurred, nor have I expended one shilling for repairs; and it is now in as good order, with the exception of the floor on which horse walks, which is much worn and may require

sing in the course of one or two years. I can, therefore, say that "it still holds the same place in my opinion that it did in 1837," and that I have never regretted the outlay, and consider it one of the best measures that has ever fallen under my observation.

From the description of "Hubbard's Power," I did think it complicated; not so with Hale's, which I will attempt to describe. It is a self-supporting chain, with a wood floor, running on an inclined plane, and occupies a space of three by ten feet. Although the box in which the horse walks is narrow, of four horses only one proved so refractory but that they were made to work; and to work it to advantage, it requires a heavy, free, quick-stepping steed, with which from 60 to 70 bushels of wheat or rye, and from 80 to 100 bushels of oats can be threshed in one day. The threshing is an open or piston cylinder and concave, set with small teeth at 13 inches long, secured by screws, and with the option of breaking three or four of the teeth with or without, no accident or expense has occurred.

In 1841 I procured one of Pitt's *Separators and Binding Machines*, and attached it to my threshing machine, which does not seem to increase the labor of the horse a trifle, and delivers the grain clean for the bag; I consider a great saving of time and labor; and the separation is more complete. When the threshing is performed at one operation and the fanning at another, it requires more room on the floor, it generally takes as much time to clean up as it takes to thresh. With two men and one horse, I can thresh, bind up the straw, stow it away, and put bushels of oats into my granary, in as good order when passed through the fanning-mill separately, as I must say I prefer to have the two operations performed at the same time.

Mr. Pitts is now in your section with some of his machines, so improved that they will thresh and clean such grain, I will venture to say, as any other horse; and I have no doubt a discerning public will appreciate their value, and encourage an industrious and ingenious mechanic.

It has been said, with how much truth I will not now try to say, "that Pitts' machine is in advance of age—that the farmers are not prepared for so powerful a machine." The price at which he holds them is to be the greatest objection; still, when we take into consideration the advantages they have over the old, viz: can be used in an open field; will thresh clean at the same time, as much grain, and do it well, if not better than any other machine, with less power and less hands, it cannot after all be deemed a dear machine at \$250. His horse power is very strong and works remarkably easy, and is so adapted as not to be easily put out of order.

At the time I purchased my machine, Mr. Hale ascertained them at Waterville, but soon after returned and established himself at Rome, where, I have been informed, he made some improvement in the threshing machine. This establishment was burned down a few years since, and he then removed further west, so that place I am not advised. It would be well to know who would make known his whereabouts, by an advertisement in the Farmer.

From the six years' experience I have had with his machine, I would recommend them to the farmer who threshes from 600 to 1000 bushels of grain, and to the farmer who cultivates his thousands of bushels of old, without any disparagement to them, advise the purchase of Pitts' Threshing and Separator, as for economy as dispatch.

C. N. BEMENT.

see Hills Farm, August, 1842.

Wheat was selling at Chicago at 62½ cts., Aug. 23. Buffalo, 62 cts., Aug. 29.

Reply to John Farmer on a National Tariff for protection.

MR. COLEMAN—Your correspondent, John Farmer, travels without his host when he undertakes to suspect me of mistaking facts. Had he been as well informed on the subject of our National Tariff, as he is refined and witty, he would have known that the high tariffs of 1828 and 1833 did not receive even a majority of the votes of the New England States.

The votes from the Journal of the U. S. House of Representatives on the tariff, from 1816 to 1833, will determine this. I would also advise John to read Mr. Salmonstall's report from the committee on manufactures, March 1st, 1842. He will then learn, that the duty on American cotton as proposed by that committee, is made as Mr. Salmonstall asserts, "to conform to a statement made by Edw. Gray, Esq., on manufacture of Eliott's Mills in Maryland." The Yankee Cotton Memorialists tell the committee plainly, that the domestic articles of most of the white, and many kinds of colored cotton goods, need no protection, that they supply not only all the home market, but that they are exported to the average amount of \$3,000,000 annually.

John Farmer asks why the New England Factories closed and their hands unemployed at this time. I will let a manufacturer of my native town answer the question; he says, "We have four cotton factories and one of negro cloth now closed." I asked him if a protective tariff would help them, he replied "that their own cheapness was a sufficient protection; that we had all the home market, fine prints excepted, with a fair demand for export; that over-production, from home competition and the vast improvement in machinery, had long been the cause of very restricted profits to the manufacturer, and that the present stagnation of trade precluded sales even at the lowest profits; hence the necessity of producing less."

But John Farmer does not seem to know that the manufacturing interest of the United States has been fostered more than any other interest, and that its increase has been in full ratio and proportion to the increase of our agriculture and commerce. In proof of it, our imports for the 3 years preceding the first embargo, averaged 22 millions of dollars per annum more than in the year 1840. Since 1808, it is computed that the machinery erected in New England alone, is equal to the labor of two millions of individuals. It also strikes me that friend John has an exceedingly miscolored view of the ramifications of our foreign trade, when he says that "specie is the only article with which we at the north can pay a foreign debt." We paid eight millions in the article of flour alone last year, to say nothing of our other northern exports. But is not the north as directly interested in the exports of the south as the south itself? If John will attend an abolition lecture he can there learn the fact. The north manufactures and carries for the south, and receives its pay in bills on England drawn against cotton, rice and tobacco; and at this time bills are so plenty in the New York market, that specie will pay a freight from England to the United States; so far from our specie running out of the country at this time, the tide has now turned and specie is running in, to fill up the vacuum made by the explosion of our paper bubble. Hence it appears that it was a high tariff and an inflated paper currency, which drove our specie out, and that a reduced tariff and sound currency are bringing it back again. So far from specie going out of the country, it never goes out when it is indispensable for a currency at home; but when bank paper can be made not only to represent specie, but intrinsically to supply its place specie has no longer any office to perform here, and it

will of course be exported where it is of more legitimate use.

I will not accuse John Farmer, as he did me, with wishing to mistake facts, when he says that "our specie has gone out of the country in an uninterrupted stream." I only want to show him that he is mistaken at that point with the report of the Secretary of the Treasury. Mr. Forward sets down the imports of specie into the United States from 1821 to 1841, at \$181,501,510, while our exports for the same time were only \$133,759,910. As much specie is brought over by private immigrants which is not taken into the above account, the amount of our imports of specie is probably much larger than this exhibit. During the present year, 1842, the import of coin has been unusually large. So that there is but little doubt but that for the last twenty years, in spite of all our paper substitutes, the specie of these United States has increased at least fifty millions of dollars.

The difference of opinion between John and myself, is simply this. I want all our great national interests, agriculture, manufactures and commerce, protected by sound and equal laws; but he seems to embrace the delusive notion, that if we stimulate manufactures by taxing the other interests, the home market of the farmer will be so much increased by it, that he can easily dispense with that foreign trade based on exports, which has for the last twenty years furnished us so many luxuries, and increased our specie to the amount of fifty millions of dollars. S. W.

Waterville, Aug. 6th, 1842.

Naagara Agricultural Society.—A Rule of Premiums.

This Society, whose fair is fixed for the 18th and 19th of October, have offered \$500 in premiums. This does them much honor. They add farther, what ought to be considered every where as absolute, that the conditions of competition and premiums will be invariably adhered to. The crops, likewise, which will receive the premium, it is stated, will not be the greatest; but those which are raised at the least expense. We dissent entirely to this condition, as its direct effect will be to discourage effort and cultivation. The great object of all premiums in regard to crops, should be to see how much can be produced on an acre; and the whole method and expense of cultivation being detailed, any man can then judge for himself whether the increased crop will pay the increased expense or whether such cultivation be profitable. But in the other case, by the above rule, a premium may in fact be given for negligence and parsimony. An application was made not long since to an Agricultural Society for a premium on a crop of grain, as well as we can remember, where the applicant rested his merit in getting a large yield without having applied any manure, without having ploughed more than once, and without having bestowed only the most superficial after culture. That is, he wanted a premium for the natural fertility of his soil, which was not due to himself; or in other words, he wanted a premium for having done nothing, which can hardly be recommended by the Society as the best mode of improving agriculture. To determine the comparative profitability of crops, an entirely different set of premiums and rules should be instituted.—Ed.

Woolen Rugs for Manure.—About 20,000 tons of these are annually consumed by the farmers in the South of England. They are said to warm the land. The good effects extend to the second year.—Johnson.

Rod Cedar.—If the lining of drawers in which cloths are kept is made of pencil cedar, no moths or other destructive insects will get into them. This wood is cheaper than wainscot or mahogany, and gives an agreeable perfume to the cloths.

Condition of the English Farmers.

DEAR SIR—In my communication published in the July number of the Farmer, I attempted to establish two points, viz: that the climate of England is more favorable for agricultural purposes than that of this country; and that the farmers of England do not fare so poorly as the letter of S. W. would lead us to suppose. In proof of the latter position, I quoted from a recent publication of Wm. Howitt. You are quite correct in supposing that he is not describing the every day life of farmers, for I gave another quotation in which he says "such is a specimen of the festivities of what may be called the middle and substantial class of farmers; and the same thing holds in degree to the very lowest grade of them." As this description holds good, in degree, from the highest to the lowest class, I mean of farmers, so does it, in degree, from their days of festivity to their every day fare. Now you must not suppose, that, in giving Howitt's spirited description of the good cheer of an English farm house, I was advocating the introduction of similar extravagance amongst our farmers. I was only attempting to prove that the English farmers were not reduced to that miserable diet described by S. W. The farmers alluded to are, I grant you, many of them merely tenants, not like ours, freeholders, owning from one to two or three hundred acres of land, but surely this makes my case stronger. At any rate, I cannot agree with you that it is fair to draw a comparison between the substantial freeholders of this country and the laborers of England, whose only wealth consists of their daily labor. It is neither the climate nor poor living, which induces the English farmer to leave the land of his birth, and his early associations, to seek a home in a strange land. I am satisfied that in no other climate can man and beast endure an equal degree of labor and exertion with so little fatigue; and I am equally satisfied that no class of men need live on better fare than the English farmers. There are many other circumstances too, in which the English farmer has a decided advantage over us; he has at all times a market at hand, where he can get cash for his produce. Every farmer lives within reach of two or three towns where weekly markets are held; if he wants to buy stock he knows where to go for it, and if he wants to sell grain or produce of any description he knows where to take it; and is sure to meet with competitors ready to pay the value in cash, so that when he has payments to make, he can provide for them without any sacrifice of property.

I have said so much in favor of England as an agricultural country, that I fancy I hear you exclaim, "if this be a true picture, why leave it?" Wait, and I will tell you. You have, as yet, only seen the bright side of the picture, let us reverse it, and what are all the advantages and conveniences above enumerated, when we find on the opposite side the tithe man, the excise man and the tax gatherer? The last named functionary has his hands constantly in your pocket: the other is peeping about to see that you do not convert your tallow into candles, your barley into malt, or gather the hops which are growing wild on your fences. But the visits of these gentlemen are as nothing in point of injustice and vexation when compared to the visit of the tithe man. To give you some idea of the working of the tithe system, I will instance the parish in which I lived. It was the custom to take the tithe on a seven years lease, the rector appointed the valuer, and we had the option of taking them at his valuation, or suffering them to be collected in kind. We always chose the former as the less vexatious of the two. You will perceive that on this plan the best farmers had to pay the highest tithe. On one occasion, we were rated at 9s. 3d. stg. per acre; produce was high when the valuation was made, but it kept

falling, so that we had a very hard bargain. We presented a remonstrance to our rector and petitioned for a reduction, but his cool answer was, "No, when I consult a physician, I take his prescription." Meaning, that having employed a person to value the tithes, he would abide by his judgment. We certainly could not complain of any injustice in this decision, because if prices had risen in the same proportion we should not have been called upon to pay any more. But the hardest feature of our case was, that we had to pay him whether we went to his shop for physic or not. He drew between two and three thousand pounds per annum from the parish, and had all the duty done by curates for about £200 per annum. We never saw the rector except for a month, which period he was compelled by law to reside on his living, but he made it a month of Sundays, for he came on the Saturday night and left us again on the Monday morning after the fourth Sunday. Is not such a system as this enough of itself to drive a man from his country, let that country, in other respects, be ever so desirable to live in?

I recollect seeing a letter from an English farmer who had emigrated to this country. Did he express his joy in finding a climate and fare superior to what he had left? No! he commenced his letter by thanking God that he had found a spot of ground where priest had never set his foot, and showed all through his letter a spirit of exultation at escaping from the grasping rapacity of the tithe man.

Yours, &c.

B. M.

Climate and Productions of England compared with the United States.

MR. COLMAN—Your correspondent B. M. comes down upon me with a wet sail, for giving the preference to the climate and agricultural products of the United States over those of Great Britain.

As he very gravely asserts that "English horse beans are equal to our Indian corn for all feeding purposes," I shall leave him alone in the glory of his argument, and confess that I was in "error" when I gave the preference to the agricultural productions of the United States over those of England. But to show that I did not speak without book, and that I had some authority for my "error," I quote the opinion of an English master in rural economy. Capt. Barclay, in his agricultural tour through our country in 1841, invariably extols our soil and climate in the most elaborate and even extravagant terms, while he is very general and unparing in condemning our want of skill, and slovenly neglected system of agriculture. To account philosophically for our defects, he charges them directly to the overflowing bounties of our superior soil and climate; he says "where nature is bountiful man is invariably indolent." In England, where nature gives less, men are more provident and industrious. Struck with admiration at the luxuriant Indian corn in the neighborhood of Philadelphia, where it was grown for feeding cattle and horses, Capt. B. frankly admits that the cultivation of our "corn entirely supercedes the culture and use of other green crops as food for stock."

In equinoctial America, where the cereal grains and tropical fruits alike abound, Indian corn is almost the only bread stuff of the country. Humboldt tells us that there is but one plant, growing from the earth, which yields as much food to man; the plantain (*Musa paradisiaca*) is supposed to yield more nutriment off a given space of ground; but its various adaptation as food for man and beast, bears no comparison to the Indian corn.

In Spain, Portugal and Italy, Indian corn is cultivated to a great extent as food for the poorer classes, and I here once more venture to repeat, that if Great Britain, by some inversion of nature's laws, could be

favorable with our warm, stimulating sun, so that the soil would grow Indian corn, we should hear no more of her hungry population feeding on bread made "damp mouldy grain."

B. M. takes a narrow view of our extended growing region, when he says "that in a good season other crops suffer;" a large crop of corn common with other grain is very general in Ohio, Indiana, and in other states south and west. The present season with us, is called favorable for all crops except corn, and yet at this time, 20th July, we are here on the "Seneca level" the Dutton corn in full bloom, with all the cereal grains on the eve of a dundant harvest.

S. W.

Condition of Ireland.

The subjoined interesting letter should have been given sometime since; but was accidentally overlooked. It will not fail, however, now to be read with pleasure; and we have strong hopes that it may be followed by others.

Dublin, December 14th, 1841.

M. B. BATEMAN—

Dear Sir—I little dreamed two months ago this day when we were at the Fair in Alexander, that I should be in so short a time in the old world. But so it is, although I cannot realize that I am so far from home. Steam has almost bridged the Atlantic, and brought the two worlds to be near neighbors. Three weeks' day I was in New York, and I have been nearly a week in Ireland.

My visit to this country is one of business as well as pleasure, and I shall see all that can be of use or interest to a practical man. I shall make myself familiar with their methods of putting up their beef, pork, as well as butter. I shall examine their cattle, sheep and horses, and see their mode of feeding, and if so that I am blessed with a safe return my own dear country, I shall be able to tell our farmers all that is worth knowing upon these subjects.

I have already filled many pages with notes upon these points, which at a more leisurely period may be condensed or elaborated for the public. I trouble myself very little with viewing old castles or remarkable ruins. They do well for the tourist who wants to spend his time and make a book. The living present is my object, and to that I mainly lend my efforts. Although I have been so short a time in the country, yet I have not been an idle spectator. I have seen some of their best farming country, and their best stock.

Some of the country is very fine, especially a portion of that passed through on the route from Cork to Dublin. To me it has a very odd looking, though pleasant appearance. The fields are generally small, the greater part being from three to five English acres, divided by hedges and ditches, which at this season do not present a very cleanly or snug appearance. I suppose in summer they look much better, though proprietors complain very much that the poor people cut down the trees and brush during the winter for fuel. The soil is good generally, and the climate, though varied.

Winter wheat for the last three years has been very uncertain crop, and the prospect now is that it will be shorter next year than was ever known before. All grain or spring crops grow remarkably well, I give an abundant return. At one time Ireland was to export large quantities of wheat and flour to England, but now she imports more wheat than she exports. The corn factors account for it, by the increased production at home, owing to the great attention attending its cultivation, and the farmers turning their attention more to grazing, which is very profitable owing to the immense demand for all kinds of stock for export, and an increased demand at home, getting out of the improved condition of the people:

temperance movement having done more to regenerate the country than any thing else. It is a very uncommon thing to see any man drunk. I have seen but one man yet in all Ireland that was the worse for drink. So that if they can, by any means, employ their people, Ireland must become a very independent state. I think as soon as it has been fairly tested that property is safe, and the people wish it, manufactures will flourish at once, and soon become a great source of wealth.

The weather, both here and in England, has been wet beyond any thing ever before known. It has rained almost constantly for the last two months. Thousand of acres are all ready for the seed, yet they can get no opportunity to sow their winter wheat, and much that has been sown will rot in the ground. Nothing but a miracle can save them from a short crop another year. Potatoes have not been as productive as usual, and it is so wet, a great many are yet to be doing. To add still more to the misery of the people, the wet weather has prevented a great many from laying up their usual supply of turf for fuel: peat being the chief dependence of large numbers. The prospect ahead for the poor is indeed one of unmingled blackness. Yet the splendid mansion overlooks the humble cabin, and the rich and luxuriantly living proprietor, cannot feel the misery of the ill-fed and half clothed cottager, though a tenant of his wide domain. Oh, ours is indeed a glorious country, and we are blessed above any other people. May we ever be mindful and duly thankful for those blessings, the half of which we cannot appreciate without seeing the misery and degradation of the people here in this old world.

Sincerely yours,

T. C. PETERS,
of Darien, Genesee Co., N. Y.

Useless Complaints.

To the Editor of the New Genesee Farmer:

As this is my first attempt to spread my ideas before the readers of the Farmer, the meanness of my essay may require some apology. I live in a portion of the Union where the paper is but poorly patronized, either by subscription or contribution. Most of the essays which fill its columns, are either from the pen of the editor himself or from those of correspondents living in the same latitude in New York, New England, or the western states. Not long since, two copies of the paper made their appearance at our post office with no definite address, and though they bore no other written message than the word "distribute," I thought this in common with their being sent might be construed to mean considerable. It might signify that the Genesee school of agriculture wished to edify us Marylanders; or that they would know what we were thinking and doing; or that the Farmer desired our support; or, perhaps, all these things together. I would not be the one to undertake the cause of my neighborhood with the New Genesee Farmer, were it not that I supposed there were no other likely to do it. It is true I have some ideas not just of a local nature to communicate, but these I could whisper to that able correspondent, who might present them in a more attractive garb. Consequently, if my friend Colman thinks my remarks would be unprofitable to his readers, he may keep the edification to himself.

It is a common thing with the farmers of this part of Maryland and our neighbors of Pennsylvania, to be making continually complaints about the weather. It may be that you Yankees are less ungrateful and more philosophical on this subject than we are—that you do not foolishly torment yourselves with viewing only what is gloomy in every picture, but make the best of things beyond your control. If happily this be the case, and my remarks could be thought uncall-

ed for by the state of affairs amongst you, I hope you will send us a luminous lecture on the subject in some future number of the Farmer. I shall take great pleasure in presenting it to my neighbors, that they may see I am not alone in maintaining that it is unreasonable as well as unchristian, to complain that our weather is not better. The religious farmer, who is thus inclined to murmur, I would remind of the debts he owes to a kind Providence. The farmer who does not allow obligations to a superior being to occupy much place in his affections, I would remind of the unhappiness he brings upon himself by his proneness to find fault with the weather.

Upon taking a view of the past and this much of the present year, I do not find that heat and cold rain and sunshine, could have been more happily blended in our climate to promote the whole happiness of man. Produce of most kinds comes forth at our cell in abundance, the air has been healthy and pleasant, and yet thus fraught with blessings as it is, I can hear scarcely any thing respecting the weather but a torrent of invectives. Because an occasional frosty night endangered the blossoms that had put forward prematurely, "It is the coldest spring I ever saw." When just a plenty of rain, with a temperature the most agreeable to all who have been cursed to wear clothing, was nourishing with the utmost vigour, or when wheat, oats and grass, "It is bad weather for corn,—the cut worm will have half of it." When the thermometer rose to 80° and 90° and we had a little moisture, quite necessary to prevent things from parching, "Won't this foggy weather be apt to rust the wheat." When, just at hay time and harvest, the rains were suspended for a month together, "I am afraid the corn crops will be short." Now, while the most agreeable vicissitudes of wetness and warmth are forcing our green crops to a most luxuriant growth, almost every farmer who meets me exclaims "What a bad time to harvest." Should this essay meet the eye of any one who has been tempted to such remarks as these, I beg him to consider that should the weather be really accessory to the evils here mentioned, if his care cannot avoid them, how foolish to be troubled about it! If, on the contrary, his management might have averted the bad effect, let him blame himself not the weather.

Such, of late years, has been our progress in knowledge, that the weather is almost the only thing tangible, whose laws we have not reduced to our own administration. J. P. Espy and his compeers may investigate and theorize, but if they contemplate controlling the winds and clouds, I despair of their success. Nor is it to be desired. This control of the elements is one of the essentials of success in farming, which the Creator has reserved to himself. He has promised that "seed time and harvest, cold and heat, should continue" to the end of the world, and hitherto he has verified his word. So auspiciously has he ordered the elements in our favored climate, that we are actually groaning because of our abundance. How unreasonable and impious then to complain! Instead of murmuring, let us be thankful we were not doomed to toil to bring water from the clouds as well as bread from the earth. To the kindness of Providence are we indebted that this additional burden with a thousand more, were not imposed upon us. The receiver of alms has not the shadow of right to choose, and since fruitless murmurs about what he receives can only embitter his condition, it is both wisdom and virtue to be content with our lot.

Since I commenced this article, the 7th number of the current volume of the Farmer has come to hand. An editorial on the first page entitled "Political Anomalies and Inconsistencies," is excellent. In these times of silly complaint, it is a perfect dainty in senti-

ment. Fellow farmers, consider that article. If you have any thing to say about it, I would like to hear it. I would say something myself, but am too near the end of my sheet.

I must yet notice an article on "Noxious Weeds," on page 103 of the late number. I object to the term "noxious," as I have yet to learn that a single plant that has come from the Creator's hand is "noxious." It is true, the sacred historian seemed to consider "thorns and thistles" as an inconvenience, when he speaks of their growth as a consequence of man's disobedience; but since the earth does produce them, we might as well just make the best of it. We have found that thorns make very convenient fences, and to some parts of the world it would be a real loss to part with them. As for thistles, just look at the fair side of T. Tuff's account, on page 105. How much better for his brother's land, that those Canada thistles absorbed from the air a fund of nourishment for some future crop, than if, while its owner neglected it, no "noxious weeds" had taken possession. Continual cropping would exhaust any land, did not a growth (of "noxious weeds") spring up in the intervals of culture, to replenish its fertility by their substance which is not thought worth gathering. Friend Colman, I have not room for more, than to say; but I hope the subjects I have hinted at, will receive more ample justice from able pens. Thy patron,

L. BALDERSTON.

Cecil County, Md., 7th mo., 1842.

For the New Genesee Farmer.

"Spare the Birds."

A sort of skirmish has been going on for some time past between the advocates of the birds on one hand, and the friends of unmangled fruit on the other; the one maintaining that all the depredations of the feathered race on the products of their orchards are immensely overbalanced by the hordes of pestiferous insects they destroy; while the others say that the good they do is greatly overrated, and that even those insects which they do eat, are more commonly of the harmless kind, the more destructive affording not quite such delicate morsels, and as a consequence remaining untouched.

Now all this contention would much better become the mode of philosophical inquiry adopted by philosophers of former centuries, who tried to investigate the operations of nature by abstract reasoning in their closets instead of observation in the open air.

"They could tell what time of day
The clock would strike, by Algebra."

and some of them even went so far as to get into long and angry quarrels whether two angels or spirits could actually occupy the same mathematical point at the same time!

Common sense teaches that when any thing is to be ascertained in the natural world, the right way to do it is by direct observation and experiment not by splitting hairs and dove tailing syllogisms. If you want to know which way the wind blows, why, go out doors and see; or how many bushels of wheat you have to the acre, measure it; argument and guessing will not avail much. So with the bird controversy; instead of battling it out on paper, resort to direct examination. Watch their operations, and see what they eat; dissect their stomachs and see what they have swallowed; and let not hasty examination suffice. The experiments must be repeated, and repeated, and repeated,—in all seasons and at all places; and then we shall not work in the dark, but know which are our enemies and which our friends; which are devouring the noxious and which the harmless insects; and properly estimate the pleasures of their singing, while we are sighing for the loss of our fine fruit which they have just swallowed. J.

We publish the following Circular with pleasure, and hope that all interested will give it their particular attention. The silk culture is certain to go forward. The public mind will presently recover a healthy state in regard to it. We want the results of actual experience—facts, accurately observed, clearly stated and fully authenticated; then no man who puts his hand to the plough need look back. We have had moonshine and Jack-o'-lanterns enough; mystification and impositions in abundance; now let us proceed by the clear light of day. As a branch of domestic husbandry it is sure to afford an ample reward to labor.

SILK CIRCULAR.

To Silk Growers in New England.

Gentlemen—At a Convention of Silk Growers, held in Northampton, on the 10th Nov. last, it was unanimously

Resolved, That, as during the infancy of the Silk business, great practical benefits may be expected from periodical meetings of its friends, a committee be chosen to consist of one from each of the New England States, whose duty it shall be to call a Convention at such time and place as they may deem expedient, to be called "The New England Silk Convention."

Thereupon, I. R. Barbour, Oxford, Mass., Dr. P. Brownell, East Hartford, Ct., David Benedict, Esq., Pawtucket, R. I., Dr. Artemas Robbins, Bellows Falls, Vt., Calvin Messenger, Newport, N. H., and Luther Severance, Esq., Augusta, Me., were appointed as this committee.

In pursuance of the purposes contemplated above, the subscribers say, that they design to invite a meeting of Silk Growers at some central place, the early part of the ensuing autumn. In the meantime, it has occurred to them, that, by an early attention to the matter, a great amount of valuable information connected with the Silk Culture, may be collected as the results of feeding the present season, and embodied in the form of a *Statistical Table* to be laid before the Convention and the public.

It is cheering to know that the results of the past summer's operations have been generally decidedly encouraging, that the aggregate of the Silk Crop in Massachusetts, shows nearly a *three fold* advance upon any preceding year,—but this is probably about the ratio of increase in the other States of New England, and throughout the country,—that public confidence, after the late revulsion, is returning to the business, and that the Silk Culture is extending itself as rapidly as correct information respecting it is diffused; in giving promise that it will soon become fully established.

To secure this important object, all that was wanted by our intelligent and enterprising men, is, *facts*, *facts*—well attested *facts*. The results of feeding in 1841, could they now be all collected, and embodied so as to give a *Tabular View* of the whole matter, would, it is fully believed, at once satisfy any business man, in regard to the *entire feasibility* of the Silk enterprise, and that it profits, when rightly conducted, far greater than in other branches of ordinary farming. Let us, then, be prepared to give to the public these facts, next autumn, in such a form as to command the confidence of business men. Do we not owe this small service to ourselves, to our country, and to the unborn millions that are in future times to be clothed, and fed, and educated from the fruits of this interesting form of agricultural industry?

For this purpose it is only necessary for each one engaged in the business, whether he does much or little, to keep such records as will enable him to answer the following questions—

1. How many seasons have you fed worms?
2. What quantity of land have you fed from the past season?
3. How old are your trees? (If they are of different ages, give the average.)
4. How many lbs. of cocoons have you made, weighed as they are gathered?
5. What has been the expense of making the cocoons here reported?

These questions can all be answered in figures. For a note of estimating expenses, see below. In addition to these questions, there are a few others which we suggest.

1. What kind of trees do you use?
2. Have your trees been essentially injured by standing out winters?
3. Do you head down your trees in the spring?
4. In gathering foliage, do you cut up the bushes?

5. What kind of buildings do you feed in? and how well ventilated?

6. Do you give your worms any artificial heat?

7. Have you ever fed in an open place, like a shed, or corn barn, where the worms had a perfectly pure air? If so, state the results very particularly.

8. Do you use air-shedded lines upon your worms?

9. Have you failed in any part of your operations the past season? If so, state the cause and circumstances.

These points will be all that is essential to the purposes designed, though we shall be thankful for any remarks or facts bearing on the general subject. To give expenses by some uniform rule, we suggest the following simple method. Make a little book, in which, at the close of each day, to enter the number of hours employed by men, women, and children. Then consider the labor of able bodied men at 10 cents per hour; women at 6 cents; boys and girls between 15 and 17, at 5 cents; between 12 and 15, at 3 cents; and under 12, at 2 cents.

The expense of planting trees, we wish to be given by itself, as that is not an annual expense. Give us also, the fair rent of the buildings used, and we have all that is wanted.

That we may have time to prepare the contemplated Table in season for the Convention, we wish to have the returns all sent in by the 15th of September. To every person furnishing a return, free of expense, a copy of the table will be sent. Direct to I. R. Barbour, Oxford, Mass., post paid.

I. R. BARBOUR,
P. BROWSELL,
ARTEMAS ROBBINS,
CALVIN MESSENGER,
LUTHER SEVERANCE,
DAVID BENEDICT,

Committee.

March 24, 1842.

P. S. The Committee design to send this circular to every Silk Grower in New England. But many of course will be overlooked, because unknown to them. Will you, therefore, show this to all in your neighborhood, and get as many returns as possible. In Massachusetts, returns cannot be less than 500 cocoons of some sort. In New England probably not less than 2000. From all these establishments we would hope for full returns, in due time, and free of expense. All Silk Growers are equally interested in the object aimed at, and the committee, as such, have no funds.

10,000 PEACH TREES.

For sale by the subscribers at their Nursery, (near M. cedonville on the Erie Canal,) all of which have been propagated from BEAUMONT TREES, whose genuineness or excellence has been thoroughly proved. They are of fine and very thrifty growth, and have all been at least once transplanted, and the roots thus greatly improved for again re-planting, so that the danger of loss or even check in growth from this operation, is exceedingly lessened. Price 25 cents each, \$20 per hundred, \$150 per thousand or \$160 well packed and delivered for transportation.

THEY ARE THE CHIEF VARIETIES, which will afford a constant succession of fruit from early in 5th mo. (Aug.) till late June ripening according to the order in the list. EARLY ASSAULT—fruit small, good, tree of slender growth. EARLY TOLBORN—fruit medium size, excellent; a good bearer, and a most valuable early peach.

LARGE RED RABBIT—fruit large, excellent. Ripens ten days later than the preceding.

EARLY YORP—large, sweet and rich; a fruit of the highest character.

WHITE IMPERIAL—large, white with a red cheek, sweet, juicy and melting, and most excellent peach obtained probably from the celebrated Noisette, which it excels.

YELLOW ALDERBROOK—fruit rather large, one of the finest yellow peaches—very juicy and white young.

SEABOARD—fruit large, red, of first rate excellence.

RED CHEEK MALACOTON—fruit rather large, be. useful, of fine flavor, ranks as first rate among yellow peaches—bears well.

HILL'S CHERRY—a very large, fine, yellow peach.

LATE YORP—an excellent freestone peach, except in unfavorable seasons.

HEATHY PRING—when not too cold in diameter, sweet and excellent.

Orders directed to Thomas & Smith, Macedon, Wayne Co., N. Y., will be promptly and faithfully attended to and the trees, carefully packed, sent by the Erie Canal, or by the Auburn and Rochester Rail Road. J. J. THOMAS—Macedon, 6th mo. 1, 1842. W. R. SMITH.

Complete pedigrees will be given. Terms liberal. Particulars next month. Easy Lake transport.

SALE OF SHORT HORNS IN CANADA.

A VALUABLE lot of High Bred Durham Bulls, will be offered for sale by auction, on Tuesday, OCTOBER 15th, next, at Dundas W. Flanck, Canada.

Complete pedigrees will be given. Terms liberal. Particulars next month. Easy Lake transport.

PLOUGHS.

A NEW AND IMPROVED KIND OF PLOUGH, (of any size) designed for breaking up summer fallow, may be purchased at the Rochester Eagle Furnace,—price \$6 and \$7 each. Wood and other produce taken in exchange.

A. J. LANGWORTHY.

June, 1842.

BUFFALO NURSERY.

THE stock now on hand for sale is much larger than at any former period, embracing a large collection of the most valuable kinds of the Apple, Pear, Peach, Plum, Cherry, Quince, Strawberry, Apricot, Elderberry, Strawberry, Raspberries, Gooseberries, Currants, &c.

Of Ornamental Trees, Flowering Shrubs and Plants, a fine assortment, comprising a glutinous and desirable article in this department.

A full stock of Green-house Plants. I also offer for sale 25,000 Apple Trees of one year's growth from the Gr. fr. or Queen Anna, in autumn will average 12 bushels of fruit. The cost of 120 of the most valuable kinds—four-fifths of which have been taken out of bare-root trees and consequently will soon produce fruit. They will be sold for cash at the low price of 85¢ per hundred.—No less than 75 to 100 of any one kind to be taken.

Also 5,000 seedling trees of the true English Mazzard Cherry, at 85¢ per 100. Orders, per mail or otherwise, will receive prompt attention. Trees or Plants packed in superior order and shipped at Buffalo on board of any steamboat, vessel or canal boat required. Catalogues gratis to every applicant. Buffalo, Aug. 1842. B. HODGE.

Important Sale to Agriculturists.

IMPROVED SHORT HORN DURHAM CATTLE. On Thursday morning, 8th September, at 10 o'clock, will be sold, at the exhibition ground of the Philadelphia Agricultural Society, Rising Sun, on the Germantown Road, 3 miles from the city, a choice selection of splendid Durham dairy stock from the herd of James Gowen, Esq., of Mount Airy, consisting of imported cows, bulls, and calves from Dairy Maid, Pocahontas, Victoria, &c., and by the celebrated bulls Colostris, Prince of Wales, and Leander.

This sale will afford to breeders an opportunity of adding to their stocks thorough bred animals of high character and pure blood, and their diffusion into proper hands is a primary object in this sale, together with the necessity of a separation of the herd to prevent cross breeding.

Catalogues will be ready in due time, and the cattle may be examined at the exhibition ground two days previous to the sale. August 1.

ROCHESTER PRICES CURRENT.

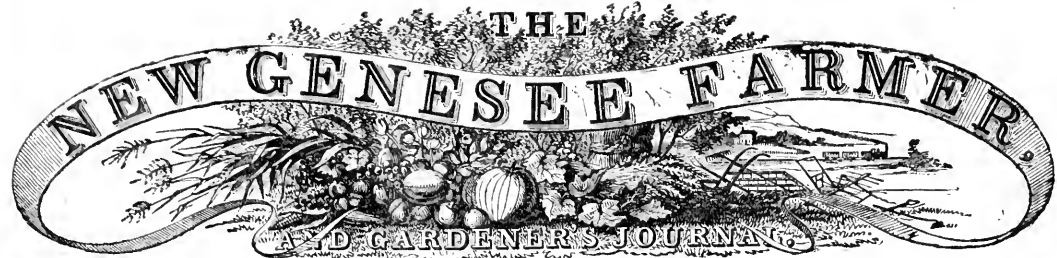
Corrected for the New Genesee Farmer, September 1.

WHEAT,.....	per bushel.....	\$1 45	85
CORN,.....	".....	38.....	44
OATS,.....	".....	19.....	22
BARLEY,.....	".....	38.....	50
RYE,.....	".....	44.....	50
BEANS, White,.....	".....	75.....	88
POTATOES,.....	".....	18.....	22
APPLES, Desert,.....	".....	25.....	38
FLOUR, Superfine, per bbl.....	4.35.....	4.50	
" Fine,.....	4.00.....		
SALT,.....	".....	1.00.....	1.25
PORK, Mess,.....	".....	8.00.....	8.50
" per 100 lbs.....	3.00.....		
BEEF,.....	per 100 lbs.....	3.50.....	6
PULTRY,.....	per lb.....	5.....	10
EGGS,.....	per dozen.....	10.....	12
BUTTER, Fat,.....	per pound.....	10.....	10
" Firkling,.....	".....	8.....	9
CHEESE,.....	".....	5.....	6
LARD,.....	".....	6.....	8
TALLOW, Clear,.....	".....	8.....	
HIDES, Green.....	".....	4.....	44
PEARL ASHES,.....	per 100 lbs.....	5.00.....	
POT,.....	".....	4.75.....	
WOOL,.....	per pound.....	29.....	28
HAY,.....	per ton.....	16.00.....	8.00
GRASS SEED,.....	per bushel.....	1.00.....	1.25
CLOVER SEED,.....	".....	5.50.....	6.00

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Address: M. B. BATEHAM or H. COLMAN, Rochester

METEOROLOGICAL OBSERVATIONS.

MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY

L. WETHERELL, AUGUST, 1842.

Date.	Thermometer.		Winds.		Weather.		Rain Gauge.
	Shade.	1 o'clock P.M.	Mean.	A.M.	P.M.	P.M.	
26	68	84	72	74.33	N E	N E	cl'dy
27	66	78	72	72.33	N E	N E	cl'dy
28	68	82	72	74.	N E	N E	fair
29	68	74	62	65.	N	N	fair
30	50	74	60	62.83	N E	N E	fair
31	59	83	73	73.66	N E	N W	fair
1	71	90	80	80.16	S W	S W	fair
2	70	74	64	67.33	N W	N W	cl'dy
3	58	63	58	59.	N E	N W	cl'dy
4	74	67	67	67.	S E	S E	fair
5	62	74	69	62.5	N W	N W	fair
6	45	72	58	60.5	N W	N W	fair
7	58	78	64	64.66	N W	N W	fair
8	50	69	55	56.66	N E	N E	cl'dy
9	56	55	53	53.5	N E	N E	rain
10	49	62	54	57.16	N E	N E	fair
11	62	84	72	73.66	S W	S W	cl'dy
12	68	74	61	65.33	W	W	cl'dy
13	54	62	54	44.66	N	N	fair
14	48	66	56	58.33	E	E	fair
15	58	68	60	61.5	E	E	rain
16	55	64	54	57.16	S W	S W	fair
17	52	62	56	46.66	W	W	fair
18	52	65	56	57.33	S W	N W	rain
19	50	61	54	53.66	N W	N W	rain
20	42	59	53	45.	N W	N W	rain
21	52	55	43	53.	N W	N W	cl'dy
22	40	44	43	42.	N W	N W	cl'dy
23	38	48	40	42.33	N W	N W	cl'dy
24	40	55	44	44.33	S W	N W	fair
25	38	60	46	47.66	N E	N E	fair

Rain Gauge for	August,	1842,	1.42 inch
"	"	1841,	1.60 "
"	"	1840,	4.04 "
Monthly Mean,	"	1842,	67.35 deg.
"	"	1841,	67.34 "
"	"	1840,	68.13 "

Remarks on the Weather from August 26th to September 25th.

Aug. 26th and 27th, gentle showers; 28th, foggy this morning; 29th, fair and continued so to the end of the month.

September, the seventh month from March, which was formerly the first day of the year.

Sept. 1st, fair; 2nd, cloudy morning—cleared off in the afternoon; 3d, cloudy; 4th, fair during the day, but rain at night; 5th, fair and continued so until the 8th; 9th, rain; 10th, fair; 11th, thunder shower early this morning, also this afternoon and evening, and very rainy through the night. 12th,

cloudy; 13th and 14th, fair; 15th, rain—a powerful shower this afternoon at 4 o'clock; 16th, rain—cleared off towards night; 21st, a very windy day; 25th, a little frost this morning.

The month has been warm and wet; the rain gauge has shown a fall of water equal to 5.15 inches.

The mean temperature of the first day of September, was 80.16 degrees; the highest this season.

Note.—The planet Mercury may be seen Oct. 8th, 25 degrees and 7 minutes east, angular distance from the Sun.

Farmers' Holidays!

This is the month in which most of the Fairs and Cattle Shows are held, and every farmer should attend one or more of them. In addition to the list given on page 159 of this paper, we mention the following for the benefit of more distant readers.

Queens Co. at Hempstead, L. I., Oct. 13th.

MASSACHUSETTS.

The Hampshire and Hampden Society will hold their twenty-fifth Fair and Cattle Show at Northampton, Oct. 12th and 13th.

Worcester Co. at Worcester, October 12th.

Plymouth " at Bridgewater, " 12th.

Bristol " at Taunton, " 12th.

MAINE.

Kennebec Co. at Readfield, Oct. 12th and 13th.

Cumberland Co. at Gray's Cor. Oct. 19th & 20th.

Oxford Co. at Norway, Oct. 19th.

CONNECTICUT.

Union Society, at Plainville, Oct. 12th.

PENNSYLVANIA.

Philadelphia, at Rising Sun, Oct. 12th and 13th.

The Fair at Albany.—The Albany Argus says,—

"The entire affair went off admirably. A great and generous spirit of emulation pervaded the Fair, in all its departments, and its vast and varied displays, producing results surpassing the expectations of its most sanguine participants."

Sale of Short Horns.—Our readers in Canada and the West, will notice the advertisement in this paper of a sale of thorough bred cattle to take place at Dundas, on the 15th inst. We have seen some of these animals, at the residence of the Hon. Adam Ferguson, and take pleasure in stating that they are among the most perfect and beautiful specimens of Durham Short Horns we have ever witnessed.—*Pub. N. G. Farmer.*

Butcher's Meat in England.

One of the most celebrated cooks in Europe, and the favorite of distinguished Sovereigns, gives the following opinion:

"Butcher's meat in London is fine, and yet it has not the unctuousity of our meat in *potages*, sauces, and *consommés*. The cause is in the climate, and in those perpetual fogs which deprive the pasturage of a part of their nutritive juices, by keeping them too green."

American Toast.—"The ladies—the only endurable aristocracy, who rule without laws, judge without jury, decide without appeal, and are never in the wrong."—*Eng. paper.*

Crops in South Venice in 1842.

Mr. ENRICH—Having given the readers of the New Genesee Farmer an account of the crops grown annually in this town, since the commencement of your valuable paper, (the New Genesee Farmer,) I continue the practice.

Wheat.—The crop in this vicinity is not very good; the rust has injured it so that the crop will be very light this season. The wheat, however, is somewhat better than some persons anticipated it would be, a few days before harvesting. Those that have threshed for seed, find it better than they expected; but on an average, I think there cannot be much more than half a crop grown in this town.

Corn.—The crop will be light this season. There are, however, some fields of corn that have the appearance now of being pretty good. The cold months of May and June were injurious to the corn crop; so much so, that many farmers ploughed their corn up and intend to sow wheat. If the frost should keep off through the remainder of this month, there will be some very good crops of corn; but on an average the crops will be exceedingly light in this quarter.

Barley has done well this season. The crop may be considered a good one.

Oats have done very well too; I think I never saw better oats and more on the ground than were sown this season.

Peas are extraordinary good; far better than last season. As a great many were sown this season, therefore, farmers will have enough to fatten their pork without depending upon their crops of corn.

Flax is good, and a great deal was sown in this town, expressly for the seed. Flax is not manufactured much into cloth in this vicinity, other goods being cheaper and which answer the same purposes for wearing apparel.

The Potatoe crop will be a middling crop. The drought in July and August injured them somewhat, but there will be enough for our own consumption.

Spring Wheat.—There was not much sown in this neighborhood; however, what little was sown came in very well, and better than the winter wheat.

Roots.—There are but few roots grown in this vicinity, and what few there are are not very promising. Fruit is very scarce in this region of country; there will be, however, enough for our own use if carefully husbanded. The fruit is very inferior. Owing, no doubt to the cold weather last spring. Under these circumstances, we have great reason to be thankful to Him, who has given us in sufficiency and abundance these comforts and necessities of life.

South Venice, Sept. 19th, 1842. W. S. T.

Swiss Cows in Harness.

We took a drive yesterday up the most romantic valley, and met two peasants driving their cow in a little cart. They stopped to offer us some peas. I particularly remarked the cow, to see if working did her any harm; she was in excellent condition. I wish the cottager in England would adopt this custom; it never comes into his head that the cow can do anything but give milk. We know nothing of economy in England; what is daily wasted in it would save from starvation the miserable creatures who die in the streets. But what is every body's business is nobody's and so those who can afford it go on allowing waste. —*Lady Tarasour's Last Tour and First Work.*

[Translated for the New Genesee Farmer from the German.]

CHANGE OF SEED.

BY PROFESSOR SPENGLER, OF GOTTINGEN.

Occasional change of seed is unquestionably of the highest importance in agriculture. Observant farmers have doubtless remarked that, though all possible pains be taken to secure the best and most perfect seed grain, it is generally more advantageous to procure a supply from some other and distant section of country.

In the year 1811, I obtained a parcel of multicolored rye from Friedland in Bohemia—a celebrated rye district, having a clay soil. This rye, thus brought a distance of 21 miles, was sown in a sandy soil, rich in humus, which had been manured by ploughing in a green crop of vetches. It vegetated well, grew astonishingly, and attained a height of from 9 to 2½ feet, with heads proportionally long—measuring from 9 to 10 inches, and containing from 115 to 120 grains each. In the ensuing fall I sowed some of the rye thus produced, on a soil of similar character and equal quality, manured as before by turning in a crop of vetches. The stalks, however, scarcely attained a height of 7 feet—which was the more remarkable, as, in the summer of 1812, the season being peculiarly propitious, all the other rye in the vicinity was unusually tall. When sown again, the following season, this rye produced stalks averaging only 5 feet high; and the heads were proportionally shorter and less productive, in each year. The deterioration of this rye was rendered the more obvious, as, in the year 1812, I procured some fresh seed from the original locality; seeded it on land of similar quality, after plowing in vetches as before, the stalks of which grew to the height of from 8 to 2½ feet—contrasting strongly with the more stunted growth of the other.

I have experienced similar results in the cultivation of buckwheat, oats, barley, beans, potatoes, and flax. With us, the stalks of Indian corn, also, from seed imported from the southern part of the United States, attain a height of 15 or 16 feet, the first year; but the product of the second seeding will not exceed 10 feet in height; and in the third year, it will not be taller than our domestic corn.

On many soils a frequent change of seed appears to be essential, for various reasons. It is undoubtedly true that the seed can only produce a vigorous and perfect plant, when its germ is adequately developed; and it is equally certain that such a development can result only from a proper commixture of the ingredients of a soil, aided by the influence of climate, seasons, &c. But the success of the plant is determined also, in a great measure, by the kind of nourishment afforded to its earliest germs and radicles. Hence, when seed grain, having a perfect germ, is supplied, seasonably and in due proportions, with those substances which contain, in an assimilable state, the peculiar *pabulum* or nourishment which the infant plant needs, it will grow vigorously, and flourish permanently to maturity if the soil continue subsequently to furnish a proper supply of the requisite food. A field recently manured with fresh stable dung, it is well known, will not produce good seed grain; and hence it is probable that the good or bad quality of seed grain depends on the presence or absence of certain ingredients of soils. Grain grown on land recently manured with animal dung, contains, according to Hermbstadt, more *gluten* than that grown on lands not so manured; and where the land was manured with sheep dung, the grain produced is peculiarly rich in gluten, because this kind of manure contains in abundance the nitrogen essential to its formation. Now such grain is probably unsuited for seed, precisely because it contains too great a quantity or proportion of gluten, whereby the starch of the seed

grain is too suddenly decomposed. Whereas, were a less proportion of gluten present, the starch would be gradually converted into sugar—the earliest food required by the developing germ. We may, therefore, conclude that, in general, all grain is unsuited for seed if it contain a very large proportion of gluten, or of other nitrogenous substances capable of converting starch rapidly or suddenly into sugar. But in grain intended for breadstuffs, this over-proportion of gluten is a very desirable quality; because the more of it any grain contains, the better it is adapted for producing flour—gluten being among the most nourishing substances.

Experienced farmers know it to be very advantageous to sow, in a sandy soil, rye grown on clayey or aluminous upland. The reason appears to be this, that the rye from clay soils contains only the due proportion of gluten. On the contrary, it is found to be improper to sow rye from rich, moist, bottom lands on sandy soils; because the seed contains such an over-proportion of gluten as to convert the whole of the starch suddenly into sugar, and the sugar as suddenly into other substances not congenial to the germinating plant. Sandy soils in general do not furnish good seed grain, inasmuch as such grain is deficient in certain substances—as lime, magnesia, &c.—essential, nay, indispensable, to the perfect development of the germ. That sugar does, in fact, play an important part in the germination of seeds and the first development of the plumule and radicle, is manifested from the fact that all the minute seeds, parsley, carrots, &c., germinate better if steeped for a few days in a solution of sugar or in a diluted syrup. But though sugar is unquestionably of great importance in the germination of seeds and in the earlier development of plants, I do not maintain nor assert that the successful issue of the process is the effect, exclusively, of this substance. On the contrary, I am convinced that, to secure a propitious result, the presence also of alkalies, sulphates, and chlorides, in due quantities and proportions, is absolutely requisite.

There are soils which imperiously require an annual change of seed. But it is, in most cases, sufficient to procure a supply from places in the immediate vicinity, or not more than three or four miles distant—a circumstance which the principles above indicated will serve to explain.

Climate also has a very conspicuous and important influence on the quality of seed grain; and experience teaches that, for seed, such grain is best suited as was grown in a colder region or district. Chemical analysis shows that such grain contains a smaller quantity of gluten than that grown in warmer climates. Wheat from the North of Europe contains much less gluten than that from the southern coasts of the Mediterranean.

The deterioration of grain, so as to become unfit for continued seeding, I have most frequently observed in oats. But I remarked, in every instance, that the soils which produced bad seed oats were deficient in lime, magnesia, or some other substance or ingredient requisite to the full development of the germ. Oats invariably become unfit for seed if sown in soils deficient in lime or potash; and chemical examination shows that good seed oats contain much lime and potash. Now, though we may, from these and similar circumstances, deduce in part the reason to what change of seed is oftentimes necessary, it is not to be doubted, for the full elucidation of this matter, more numerous experiments and observations are desirable. Probably results highly satisfactory could be arrived at if good and bad seed grain, as well as the soils on which they respectively grew, were subjected to accurate chemical analysis.

The great benefit resulting from frequent changes

of seed, is particularly striking in the culture of flax; it being well ascertained that seed imported from Russia is greatly superior to that of domestic growth. Russian flaxseed, though commonly an ill-looking, unpromising article, invariably produces a much longer stalk and fibre than native seed, apparently much better. That climate likewise, in this case, exerts an important influence on the due proportionment and admixture of the ingredients of the seed, may be considered certain. But what the ingredients really are which contribute to, or effectuate, the more vigorous growth of flax from Russian seed, remains to be ascertained.

Again, by means of seed grain, climate may in some cases, and to some extent, be transferred from one region to another. Thus, if we sow, in a colder climate, seed oats from a warmer district, where oats ripen early, the plant will, in its new locality, mature at an earlier period than the domestic oat, though not so early as in its native region.

Finally, it may be considered as an ascertained fact, that soils chemically ill constituted, require the most perfect and best seed grain. A judicious selection will, in such cases, very materially increase the quantity of the product—the difference being in some cases not less than fifty per cent.

From the National Intelligencer.

The Polar Plant of the Western Prairies—a Vegetable Compass.

WASHINGTON, August 9, 1842.

Dear Sir—In offering through you to the National Institution a dry-pressed specimen of the *Polar Plant* of the Western Prairies, it is proper that I should give a description of it, and of its location. It is a species of fern, with one large flat leaf, whose plane always points to the north and south. The leaf is symmetrically disposed about the stalk. It attains the height of from ten to sixteen inches, and it is believed that it never blossoms. It is spread profusely in large beds over all the Western prairies, from the far Northwest to the far Southwest. It has been seen in the prairies of Wisconsin and other regions east of the Mississippi. It is never found in the forests; or, in other words, out of the prairies. It has been well known to the hunters and trappers of the West, and to the officers of dragoons; but I believe that its existence has never (at least extensively) been made known to the world. Its plane is always in the plane of the meridian, when not disturbed by high winds or other external causes. The indications are always most accurate in the valleys, where the beds are sheltered from the winds, and where the traveller finds them arranged in parallel positions, faithfully pointing out the direction of the meridian. The leaf is symmetrical, and thus there is nothing in its indications to distinguish the north from the south.

The specimen which I send was plucked from the prairies near Fort Gibson, west of Arkansas.

That its indications are actually the same wherever found is the universal testimony of all who have known of it; and I have met many who have noticed it from south of Fort Towson to a considerable distance north of Fort Leavenworth. In many instances those who spoke of it derived their first intimation of its existence from that excellent officer and capital woodsman, Capt. Nathan Boone, of 1st regiment U. S. Dragoons, son of the celebrated Daniel Boone.

The cause of the polarity of this curious plant yet remains to be discovered. Being symmetrical in shape, or rather the weight being equally distributed about the stem, it is possible that its sap or fibre is so thoroughly impregnated with certain salts of iron as to be deviated, from the period of its infant growth, by the action of the magnetism of the earth, turning like a compass needle on its stem or root as a pivot. That it is not caused by the action of light would seem probable from analogy, as vegetables acted upon by light are noted for turning their leaves or blossoms towards the sun instead of from it. At mid day the plane of the Polar Plant passes through the sun, and thus it shuns the light. I have noticed it in long-continued cloudy weather, and could find no alteration in its position.

As the existence of the torpedo and the electrical eel exhibited the influence of electricity on animal life, this plant is very interesting as showing its probable connexion also with vegetable life; thus furnishing a link to supply the chain of gradation. It is well

own that there are many distinguished naturalists and professors of physiology who would go higher even to the human frame, and predict the final discovery of the intimate connexion between electricity and the operation of the nervous system. Any connection with the action of electricity or magnetism (as supposed to be one and the same agent) is now generally interesting, when there are so many ingenious minds throughout the world devoted to such investigations.

I have ascertained to my satisfaction, that this plant has been well known to trappers and to many of the Indian tribes, and that they have been in the habit of utilizing themselves (in their tours over those vast tracts) of this humble but omnipresent guide, which a kind Providence has sprinkled over that region, and which is thus available in cloudy weather, when the sun and stars are denied them. Even if it is granted that it is less needed by the red man, no one will deny its uses to the whites in a country destined still for a long period to be roamed by hunters, traders, pioneers, and other white men.

I will here add that Captain Bonn also states that there is spread all over the West a certain root, called the "snake root," whose juices are very grateful to quench thirst, and which is found in the greatest abundance in those parts of the prairies which are high, dry, and most likely to be deprived of water in a season of heat and long drought.

It is needless to descend upon these beautiful and striking examples of the wise provision of Nature, furnishing a vegetable compass and the means of quenching thirst, ever ready for the wanderer, and which located in a region destined perhaps for the long time to come in the history of the world to be occupied by a roving population.

I am, with high respect,
Your obedient servant,
BENJ. ALVORD,
Lieutenant United States Army.
To F. MARKEE, Jr., Esq.,
Corresponding Secretary of the National Institution.

For the New Genesee Farmer.
MANURE.

The first step which a farmer takes towards successful business, is to understand the value of manure. And, as he discovers the value, he uses all the means in his power to increase the quantity. The fact is, if very farmer who owns a hundred acres of good land, and who manages his manure according to the usual practice of the country, were to use the very best means which he possesses for its manufacture and application, he would find his pocket-book heavier at the end of each year, to use the most moderate computation at the present low prices, by at least three hundred dollars.

I need not here attempt to show how that the product of the barn-yard may be increased fourfold by the use of wuck or marsh mud and lime properly applied; but my object is to call attention to another source of manure which appears to be even less known and attended to. But I ought here at the outset to caution the delicate and fastidious reader not to follow me any further, as the Editor did some time ago at the close of a similar article, though of course I mention this fact with all deference.

Poudrette is well known to be a very powerful manure, obtained in the neighborhoods of the cities where it is manufactured. But we, away back here in the country do not possess this advantage which our city friends do; and very few have ever thought of manufacturing their own poudrette. The contents of privies, instead of being regarded as of great value which they truly are, are most people look upon as a downright nuisance. Now, if the offensive odor may be removed, at the same time that a valuable manure is made, two very important points will be attained.

I have searched in vain for a particular account of the process employed by the poudrette companies; and in the absence of such account have endeavored to use such means and knowledge as I could lay hold of, and imperfect as the mode may be, it has been of decided value to me, and may prove so to others. The entrance to the privy is well flanked with evergreen trees,

and on one of the other sides which faces low ground, is a passage or road through the trees for a large tight box or trough to be drawn away from under the building, which is placed about two feet above the ground on that side for the admission of the box. A plank door shuts it in closely. Runners are placed under it so that a horse may draw it away by the iron hooks attached to it; low wheels would be better.

All the care required after this, is to sprinkle every two or three days a few handfuls of plaster (gypsum) over the inside of the box from above. This is all. Air-slacked lime, and ashes, are also valuable; but plaster, by furnishing sulphuric acid for combination with the gaseous ammonia and thus preventing the escape of this volatile but powerful ingredient, is considered the most so. Hence also, the use of plaster is found exceedingly to lessen the fetid odor, a matter of no small consequence. Lime also greatly lessens the offensive smell, but by what means I do not know. There ought to be enough of plaster, lime or ashes, to keep the contents of the box in a dry state. When it is full, it is drawn off, spread upon the ground and mixed with the soil, or made to constitute a part of the compost heap.

I have tried only one experiment on its fertilizing power, and that a very indefinite, but otherwise satisfactory one. Very rich stable manure, and poudrette, were applied to different parts of a small piece of ground—the stable manure, according to estimate, being about ten times the bulk of the night soil or unmixed base. The whole was sown with turnips. The result is, so far, that the turnips on the part manured with the poudrette, have made a growth at least three times as great as those on the part treated with stable manure.

Straw from Rusted Wheat.

We give the subjoined communications from a farmer of long experience. We cannot vouch for his philosophy, which is certainly ingenious enough, and may be well-founded; but his facts are valuable; and a small amount of facts well authenticated by observation and experience, is worth a load of theories. We wish our experienced and respected correspondent would let us hear from him again on various subjects, which must have come within his observation; and we beg him here to send us another valuable communication, not to tax himself with the postage.—Ed.

Mr. COLMAN.—In the number of the New Genesee Farmer for September, you ask the opinion of farmers in regard to feeding cattle with straw from rusty wheat. I have had some experience in that way. Let us first inquire what occasions wheat to rust. It is generally supposed the occasion is from a sudden flow of sap to the head at a certain stage of its ripening, which causes the straw or bark of the straw to burst near the heads, and the sap to flow out, and drying on the stalk, it forms the rust. Now this sap is the most nourishing part of the straw, and makes or fills the berry. Flowing on the outside of the straw and drying there, will it not increase the nourishment of it?

At this time, there is very little wheat raised in the valley of the Connecticut; but formerly, when the country was new, there was considerable; large quantities were exported. It sometimes rusted. I always found that cattle ate this rusty straw much better than that which was bright, which led me to suppose that it was better feed; and why should it not be, if it has that which would have filled the berry if it had flowed to it, dried on the stalk? I verily believe that those who have found their cattle injured when fed on this straw, on further investigation, may account for the injury in some other way.

Shrunk wheat threshes with much more difficulty than plump; much of it cannot be readily threshed out; and when there are large quantities thrown out

daily, the cattle picking out these heads, they may be over fed; or this wheat may be put up in too green a condition and become rusty in the mow, which would entirely change the nature of it.

How this may be, I cannot say, but for myself I had much rather have the straw of shrunk wheat when well secured, as feed for cattle, than that which is bright. We never keep cattle wholly on straw.

FROM A FARMER OF CLAREMONT, N. H.

Smut in Wheat.

One word respecting smut in wheat. When I was first acquainted with this country, being a boy, the wheat raised here was all smutty, so much so that it required to be washed before it was fit to use. The first year we sowed the wheat procured in the neighborhood, which was smutty, for seed, the crop was very smutty. The next season some for seed was procured from a distance, clean of smut; this wheat was washed clean, and while wet, as much good ashes was mixed with it as would stick to the wheat, and sown immediately. The crop was clean of smut, and for more than twenty years in succession we practiced the same way on the farm. We procured wheat clean of smut, washed and sowed the seed, and during the whole time never raised a crop of smutty wheat. I have more than once sown beside my neighbor's lot, nothing but a fence dividing us,—he sowed his wheat dry and I as I have stated—his was very smutty, mine quite clean. All this time winter wheat was sown and occasionally spring wheat; and to this time, which is more than sixty years, I never have raised a crop of smutty wheat, when I observed the above rule; or procured wheat clean of smut, washed, &c. Once I had some spring wheat somewhat smutty; and it was from smutty seed. For a number of years of the time I speak of, there was no lime in the country, otherwise lime would have been used instead of ashes, as we have done since lime has become plenty.

A CLAREMONT FARMER.

Killing Flies.

Many persons, like myself formerly, are much puzzled how to get rid easily of these little annoyances. I have been very successful this year, by the use of cobalt, which is indeed no very new thing, but still but practically known. I procured a six-pence worth at the druggists, pounded it fine, mixed small portions on dishes with water only, and placed them upon shelves. During the fly season, which has lasted a month or two, from two to three hundred or thereabouts have dropped dead upon the floor daily, which were easily swept away. How we should otherwise have fared, I cannot tell; but if all that have died in the house had lived to annoy us, we should have been literally blackened with them. As it was, very few indeed were at any time visible.

X. Y. Z.

Evil turned to Good.

A neighbor, who had last spring a field partly overgrown with a dense matting of Stein kraut or red root, (*Lithospermum arvense*), ploughed the whole crop of this pernicious weed deep under the soil, and planted the ground with corn. The corn on this portion of the field is now decidedly superior to the rest, in consequence of the nourishment of the decaying vegetable matter.

J.

Worms in Swine.

Corn soaked in ley, perseveringly used, has cured the disease in swine called kidney-worm, in numerous instances. A neighbor of ours succeeded with it in a very bad case. If breeders would give their hogs plenty of salt and brimstone, they would rarely be troubled with diseases.—Dollar Farmer.

ERRATUM.—In our last number, in the communication of S. W., page 141, in line 15 from top, for American cotton read foreign cottons and fabrics.

Agricultural Excursion in the Genesee Valley Concluded.

FENCES.—The fences in this part of the country are chiefly worm fences, formed of chestnut or ash rails; and in most cases ten rails in height. A mode of constructing a straight stone and rail fence which prevails here, deserves remark. In this case small stones of the size of a man's fist to that of a cocoa nut or much larger are gathered, wherever they are to be found, and laid up, beginning with a width of two and a half feet at bottom, and gradually drawing in towards the top until they reach a height of about two and a half feet. Morticed posts are set in the wall about ten feet asunder, and two sawed rails finish the fence. But it is most worthy of notice, that in order to prevent these small stones, many of which are round, from spreading or falling down, small flat pieces of wood about the size of the staves of a pail or barrel, and of various lengths, are pretty freely interspersed among the stones; and operate effectually as binders. Such a fence is not only tidy but strong; and stones are used and cleared from the field, which it has been generally found difficult to dispose of, and which have commonly been buried, or spread by the road side to disfigure or encumber the road, or left in unsightly and inconvenient piles in the field.

The want of timber for fencing must presently be seriously felt, and a worm fence, the common fence in the country, occupies a great deal of room. Another strong objection to a worm fence is, that the angles, not being reached by the plough, are commonly secure harbors for weeds and rubbish of various descriptions. In some cases I saw small pieces of hedge of the white thorn, thrifty, clean and close, and in a condition to satisfy me that there would be no hindrance to its cultivation. The common thorn of the country would make a good fence, and is easily propagated. I believe that the beech would make an effectual and durable fence, and its rapidity of growth recommends it. An intelligent English farmer of Canandaigua, whose good management of his farm entitles his opinions to much respect, states that he has seen beech hedges in his own country, which were every way to be commended. They bear trimming well and have no enemies. The white thorn is liable in the older parts of the country, to be destroyed by the borers, which infect the apple and the locust trees; and also to be girdled by the field mice under the snow in winter.

FARM BUILDINGS.—The houses in general are of wood. Here and there is occasionally met with the log-house of the pioneer; but in most cases these have passed away; or if not removed, are converted into lumber houses or sheds; and their place is supplied by neat frame buildings of one or one and a half story in height. The first edition is coarse and unsightly; and seems not in keeping with the clean and cultivated fields around it; but the second often marks a great advance, and appears with embossed covers and gilt edges. The power of habit and of naturalization in these cases often strikingly illustrated, as the "old folks" of the family look back with strong yearnings to the "log cabin" where they first fixed themselves. They are often free to confess that some of their happiest hours were passed in these homely beginnings, when amidst many severe privations and hardships, they were cutting themselves a passage through the dense forest for the admission of light into their unglazed dwellings; and beheld the mighty trees, like a retreating army, falling year after year under their victorious advances; saw the virgin wilderness, which had hitherto been untouched by the hand of civilization, now gradually pouring out its rich and golden treasures for man and beast; perceived with a proud consciousness of new wealth and power,

the rapid increase of their white woolled flocks without and their white haired urchins within door; and resting from their labors at the close of day, at the door of their humble wigwam, saw the smoke of many a neighboring cabin slowly curling upward to the skies, heard the lowing of returning herds, beheld where so lately the stately pine towered above the forest in sombre majesty, the vane of the village steeple like a new star sparkling in the beams of the setting sun, and the triumphs of civilization and improvement every where spreading themselves, as the morning's light is seen scattering the shadows of night and causing the wide landscape to become resplendent with beauty.

There are some brick houses; throughout the country clay is abundant for making bricks; and a fashion has been introduced of building with cobble or small round stones. In this case the window and door sills are of hewn stone, and so likewise are the corners; and then the walls are carried up with these small stones, commencing with a thickness of wall of two feet in the cellar, a foot and a half in the lower story, and gradually reducing it to a foot in the upper story. These stones are laid in a strong cement of lime; and these walls are cheap, durable, and handsome.

Many of the houses throughout the county are built in good taste, and a commendable regard is paid both in the villages and in retired situations, to embellishing the places with trees, shrubbery, and flowers. The locust is cultivated with great success. In these respects I know no parts of the country to be compared with what of Western New York I have seen. This speaks exceedingly well for the character of the inhabitants, for their intelligence and refinement. So far as my observation goes it does them no more than justice, for without disparagement to any other section of the country, and my examination has not been restricted, from what I have seen I do not believe there is to be found a more intelligent, cultivated and improved people, than the rural population of Western New York, a people of better manners or of better morals.

Nor do I believe that Heaven ever placed men in circumstances of more substantial comfort and prosperity. The soil is of extraordinary fertility and of easy cultivation; the climate salubrious, for the intermittent fevers, which formerly prevailed, are now of rare occurrence; the scenery in the rolling or hilly parts of the country, picturesque and beautiful; ready and cash markets are always to be found for the great staple of the country. There are extraordinary facilities of communication by railroads and canals; good common schools and advantages of education by means of seminaries and academies of the best character, and numerous colleges for obtaining, at an expense which puts it within almost every one's reach, the best and most improved education, ornamental and useful.

These are great blessings. If we estimate a man's prosperity by a pecuniary standard, we may find situations in which, by the chances of trade and speculation, men may sooner grow rich; but, if by a far wiser and truer standard, we determine their prosperity by the substantial means of comfort with which they are surrounded, and their advantages for social enjoyment and intellectual and moral improvement, then it would be difficult to find situations more favored.

PRICE OF LAND.—The price of land may be said to vary from 40 to 60 dollars. I speak now of improved farms. There is comparatively a small amount of forest land to be cleared. The land is in many cases in the hands of large proprietors, who do not care to sell and prefer leasing their farms. In some cases leases for a short time, say of a year only, are preferred to longer leases; and with a view to deter-

mine the rent, the general cultivation is prescribed, the probable or practicable return of every piece of land on the farm is estimated, and the rent calculated accordingly. This seems to be an equitable mode, and certainly more satisfactory than naming a gross sum, calculated upon the nominal value of the whole farm. The rent is expected to be paid in cash, not in kind. Short leases, where a change of tenants is likely to take place every year, would be prejudicial to both parties; but where the landlord is willing to renew the lease upon favorable terms to a faithful tenant, and encourage him in making improvements, short leases are better both for landlord and tenant.

The most remarkable sale of a single farm that has perhaps ever occurred in this country, took place in Groveland, in Livingston county; where, as I understood, one hundred thousand dollars in cash were paid for 1800 acres of land, and this was for only one half of the farm of the individual, who sold the estate. The buildings upon it consisted only of a brick house and some barns; but the buildings were nothing more than decent, and these were perhaps some log cabins upon the place. This price a little exceeded fifty dollars an acre, and the estate was bought by the community of Shakers, not for speculation, but for residence and occupation as a farm.

The fact of land in this county being held in very large parcels by individuals, has undoubtedly impeded its settlement and improvement. I certainly do not complain of those who hold it, for I know no reason to question the perfect legality of their possession, and the equitable management of their estates. Nor do I know of any scheme by which property could be generally equalized short of revolution, nor, if even by that fearful remedy, it could be equalized, how by any possibility it could be kept one hour, after the division had been effected. I am likewise as strenuous as any one in maintaining the unquestionable right of every man to the fruits of his own labor, and to the disposition, so far as is compatible with public order and good morals, of those proceeds according to his own pleasure. But I confess myself so far an agrarian as to think that the earth itself, the soil, the very foundation and means of human subsistence, should never be exclusively claimed or appropriated or parcelled out to the prejudice of any, who are disposed to cultivate and improve it, and that it should never be held as matter of mere traffic or speculation separate from the improvements which are made upon it. I could wish that the amount held by any individual should be restricted, that no man should ever be at liberty to possess that which he does not use nor improve; that the fee of the land should always remain in the state; and at the death of an individual should revert to the state, the state always being held bound to make a just and liberal allowance for improvements made upon it, or any increase of its value through the skill or industry of the man who had it in his possession. These notions, I am perfectly aware, will be held by most men as mere dreams and moonshine. Let them go as such. I regard them as purely speculative, and in the present condition of society, how well soever they may be founded in natural right, their realization never likely to be approached. They are altogether utopian. Those who have the property are too strongly entrenched in law and custom and mutual interest, to fear any change, and those who have it not, may make themselves quite contented with the present arrangement; for there will be no alterations for their accommodation. A society or community established upon principles of strict equity and justice, is little more than a mere fiction of the imagination, nor as yet likely to be realized upon any large scale even under the clearest sunshine of the gospel. Even the rich national domain, which ought to be regarded as the great leg-

ney of the people, and held sacred for the rising millions that are yet to demand bread from the earth, is, in the natural course of human rapacity and authorized abuse of power, to be covered with the mere paper titles of men, who never saw it, and care nothing for its improvement, who lie down upon it like the dog in the manger, while they or their heirs are to be made rich by the increase of its value, although to its intrinsic value or improvement they have never contributed and never design to contribute the worth of a straw.

I have already extended my remarks upon this excursion to a much greater length than I had intended. There are many topics connected with it, which I wished to have discussed at large; but this could not be done to my own satisfaction unless I took the whole paper to myself; and this would be little to the satisfaction of my subscribers; and very likely to leave the whole concern, both editing and subscription, to myself.

I wished to have discussed at large the Improvements of which I think the husbandry of the country is capable. Its agriculture, though respectable and productive, is yet in a very imperfect condition. Crops of wheat, the great product of the country, averaging only about twenty bushels per acre, and of Indian corn not more than twenty-five or thirty, are little more than a third of what the soil can be made to produce. I hold that the only limits of production, which should ever satisfy the enterprising and intelligent cultivator, are the capacities of the soil; and the only limits of cultivation are, the relation which the value of an article, when produced, bears to the expense of its culture. The capacities of the rich soil have as yet by no means been fully tested; and the various questions, what products would best compensate for the cultivation, and whether the most expensive cultivation would be warranted, and whether with the present prices of land and of labor, it is better to cultivate a large extent imperfectly or a smaller extent much more thoroughly, and various other matters growing out of these, are all questions, the proper decision of which involves so many and such various elements, the price of land, the cost of labor, the facilities of market, the supply, the demand, and a variety of particular circumstances connected with the particular localities and likewise with the domestic condition of each farmer, that I cannot now enter upon them. At present I must reserve these topics for some other public occasions; and in the mean time I beg leave to suggest them to my intelligent correspondents, hoping they may excite their wits and then, as matter of course, move their pens.

I am unwilling to close this very superficial sketch of the agricultural condition of the Genesee Valley, without acknowledging, as I do most respectfully, the kindness and hospitality with which my visits were welcomed by many of the intelligent farmers of this favored region. I shall retain a grateful recollection of it as long as I live; and be most happy to accept their kind invitations to extend the acquaintance. I deem it among the greatest blessings of my life that my taste and pursuits have led me to cultivate a most intimate acquaintance with the rural and agricultural population; and some of the happiest hours of my life have been spent at their cheerful firesides and under their hospitable roofs. I have heard much of the vulgarity and boorishness of the country; but they do not belong more to the country than to the city. True politeness consists in the habitual disposition and endeavor to make those around you happy. It is not, as many suppose, a matter of mere form and manner, but of feeling and sentiment. Among different classes or conditions of society, certain conventional forms are agreed upon under which it is to be expressed; but in cases, where form are most studied,

it too often happens that forms are all which are regarded. The genuine and substantial disposition may be discerned under a rough as well as a polished surface, and expressed in the most natural and awkward as well as the most graceful and studied attitudes and movements. An old friend of mine, in giving an account of his early life as a candidate for the ministry, told me that the kind woman with whom he boarded where he first settled, in helping him to a piece of hard-boiled Indian pudding, a frequent dish upon the table, was in the habit of cutting it into her hand and laying it in his plate; and with the spirit of a truly benevolent philosophy, he added, that "as I knew her hand was as clean as her heart was pure, I was willing to receive it in any way she chose." Yes; and so it should be to every mind that knows of how much more value is the substance than the shadow, as if it had been handed upon a silver fork or porcelain cover, protected by a napkin of the finest damask. I can say in truth that among the hundreds, I may say thousands, of farmer's families, which I have visited, I have never witnessed the slightest rudeness or incivility; and have in most cases experienced a politeness, as sincere, as genuine, and as refined in character, if not in form, as in the most brilliant and carpeted halls of city palaces.

A considerable portion of the inhabitants of this favored region have enjoyed the highest advantages of education; and to the charms of rural life add the best refinements of polished society, without, as is too often the case, destroying the simplicity of the country by the burdensome and, in the country we may safely call them, the frivolous formalities of city etiquette. When in such residences, to the rich abundance of the products of a well cultivated farm and garden, you find united a disposition for rural labor, a taste for rural scenery and rural sports, and the beautiful accomplishments of music and drawing throwing their charms around, and all mingled with a hospitality as frank, sincere, and unrestrained as it is profuse and elegant, and "books and work and beautiful play," dividing the hours, and the character and mind are found in a corresponding harmony, it is difficult to imagine any earthly condition more favored.

I might give names in these cases, for I know my description may awaken some curiosity; but this would be contrary to all my habits, and as inconsistent with my own sense of propriety as it would be offensive to the delicacy of friends to whose kindness I owe so much enjoyment.

The natural scenery of many parts of the Genesee Valley is of surpassing richness and beauty. The view of the valley from Mr. Wadsworth's residence and from the eminently beautiful residence of Mr. Murray, on the summit of Mount Morris, in its verdure, its luxuriance, its forests, its single trees, and its numerous clumps of trees left here and there with exquisite taste, in the windings of the river, in the numerous scattered residences, in the bright villages seen in different parts of the valley and sparkling upon the summits of the hills, presents a landscape of extraordinary magnificence.

Following up one branch of the valley to the villages of Nunda and Portage, to the upper Falls of the Genesee, the road traverses a comparatively new country, but one destined to be extremely rich in its agricultural productions. At the passage of the Genesee river down the Falls, and through its high cliffs the traveller of taste will find a treat, second, as far as my observation has extended, only to the wonderful and glorious Niagara. In the course of about two miles the river makes a descent, in three successive leaps, of nearly three hundred feet, and in a full state of the water, these falls combine in the highest measure, the elements of beauty and grandeur. The riv-

er has worn its way for a distance of several miles through very lofty cliffs for a long extent, of four hundred, and in some instances, of seven hundred feet in height. The whole passage is perfectly unique in its character; and while it charms by its picturesque, it produces a profound impression of awe for that mighty power which, by a steady operation for successive undefined periods, has carved out this mighty channel for these ever rushing waters through the solid rock. The traveller here, likewise, has a view of the great artificial tunnel of eleven hundred and ninety feet through the mountain, for the passage of the Genesee Valley Canal. This is a great enterprise and a work of immense labor; but standing along side of the deep gorge of the mountains, the mighty work of thousands of years, one can only exclaim, what are the works of man compared with the works of God!

Improved Stock in Genesee County.

Mr. COLMAN—I assume the liberty of calling the attention of those engaged in rearing fine stock, as well as those wishing to improve theirs, to the extensive herd of Peter A. Remsen, Esq., consisting of Durhams, Herefords, (or a cross of Durham with the Devon), the rest of various grades, amounting in all to 156 in number. He commenced his stock by direct importations from various herds in England in 1834—his Bull Volunteer, a white, was out of the stock of Mr. Coling; his Bull Alexander, a red, was out of the stock of Mr. Maynard of Harsley Hall, Yorkshire, Eng., and of as good pedigree as England can boast. I have it in my possession back to the famous Bull Hubback. Mr. Remsen resides one mile east of the village of Alexander, and any person wishing stock will, by calling on him, find him courteous and affable, willing to go into the minutest detail and at once ready to set prices upon his stock in unison with the times. Any person calling upon me can see a sample of his stock in the Bull "Red Jacket," which I purchased of him soon after I came here. He has been fed only on hay and grass, and he will raise the beam 2000 pounds, being only 3 years of age past; he has been let to 100 cows this season, and I have had to keep him in my poorest feed, as his disposition for fattening seems equal to Hubbacks.

I commenced improving my stock of cattle some 35 years since, from the imported stock of Messrs. Adcock & Mason, of Otsego Co., called by them I believe the Bakewell, which stock I continued to improve until a Devonshire Bull was brought into the country, from whence I came, and thinking a cross of my Bakewell with the Devon would succeed, I commenced breeding from that stock, and found the result most highly satisfactory, and continued in that course till I removed hence. I am now breeding, or rather commencing, a stock from pure Devon cows and my bull Red Jacket, and from present appearances I am satisfied with my course.

I cannot close my remarks without offering a suggestion to the various Town Committees of the Genesee County Agricultural Society, which is, that the members of each town committee should visit in person every farmer in their respective towns, and earnestly solicit their aid and membership to said society, and I think we should have but little fear; for when once fairly enlisted in a cause so worthy, the society must flourish, and not present such a scene as was the last year, by a deficit in means sufficient to draw the sum apportioned to this county from the state.

I am, sir, yours with regard,

ZACHARIAH CONE.

Batavia, Sept. 9th, 1842.

Remark—Having on several occasions visited Mr. Remsen's farm and admired his fine stock, we take pleasure in publishing the above notice, and can assure our readers that both owner and cattle richly merit all the praise bestowed.—*Pub. N. G. Fair.*

TRANSACTIONS OF THE NEW YORK STATE AGRICULTURAL SOCIETY.

The next paper in the Transactions is the Report of the Corresponding Secretary. This does great credit to his intelligence, zeal, and industry; and give him claims upon the grateful acknowledgments of the friends of Agricultural Improvement throughout the State. In all such cases as the trust undertaken by him, two things are particularly important; the first a clear conception of the work to be done, and second, all due diligence and perseverance in its accomplishment. In these respects the Secretary deserves all praise.

We have room for only a single quotation.

"The undersigned may be permitted to remark that he deems it one of the first objects of the State Society, to collect and disseminate information in relation to the most approved methods of conducting every process of husbandry, on the different soils, and under the varying circumstances which most necessarily exist on a territory so extensive and diversified as that of New York. To note also the gradual changes and improvements which annually occur in its different sections, and to make them the property of the whole, is also an important branch of our duties. The unprejudiced observer who turns his eye back thirty, or even ten years, will perceive that changes of great magnitude have taken place. Nor has the skill of the husbandman yet reached its height. Science is daily placing new resources at his command, and pointing out to him potent and unsuspected agencies which, for the want of a proper knowledge of them, have lain dormant within the reach of his hand. Chemistry has consented to become his handmaid; and geology at his bidding unlocks the secrets of the earth. Mathematics has wandered from the schools to teach him to construct the utensils of his labor; and zoology has made known her laws, to enhance the value of the flocks and herds who feed and clothe him.

The agricultural periodicals of the day are doing much to disseminate and equalize, among our farming population, the light which is flowing in from so many quarters. It is the duty of the State Society to take the lead in this effort, and to stamp permanently on its archives every progressive step, which attends the advance of agricultural science. In conclusion, the undersigned takes occasion to reiterate the hope already expressed by him, that the agriculturists of our State, if again called on to contribute their assistance to an undertaking of this kind, will evince as much zeal as they possess ability for the task."

AGRICULTURE OF CAYUGA COUNTY.

Two letters on the Agriculture of Cayuga County are next given. We should be glad to insert the whole, but must limit ourselves to some few quotations.

"The principal improvements in this county consist in draining, manuring, and the use of clover and plaster as a preparation for wheat. Our intelligent farmers generally drain each field sufficiently, before breaking up for wheat or corn. The increased product pays the expense in two or three years.

The beneficial effects of plaster consist chiefly in producing a large growth of clover. If this be suffered to fall, or be trampled down by cattle after it has attained its full growth, the land will generally produce a large crop of wheat.

The soil is generally a dry loam. The west, central, and part of the northern and southern sections contain considerable limestone. A part of the northern sections is sandy, with little lime. The hilly parts before mentioned, are nearly destitute of it.

The principal products of the calcareous parts of the county are, wheat and wool. Considerable quantities of pork and beef are also sent to market; the larger portions from such parts of the county as are deficient in lime, and therefore not adapted to the culture of wheat.

For wheat, naked summer fallows on swarded land, are generally used by our best farmers. In most parts of this county, the crop ought to be sown as early as the 1st of September, and the land should be clean and rich. It has been proposed to sow wheat after one ploughing of grass land. This might answer on sandy soils, but on clay, the soil would remain inert, obstruct the wheat roots, and furnish little nutriment to the young plants. Frequent ploughings cause the soil to absorb from the atmosphere substances useful to vegetation.

Barley requires a rich, clean soil, and the more thoroughly it is pulverized, the better. It should be rolled before the last ploughing, and thoroughly harrowed in. Oats are usually sown on stubble land after once ploughing. Spring wheat is but little cultivated where I reside. Until our land can be freed from Canada thistle, charlock, &c., the three last mentioned crops ought in my opinion to be cultivated as little as possible.

I would say to my brother farmers, drain thoroughly, cultivate less land, keep less stock, and never go to the expense of ploughing and sowing, until your land is in such condition as to afford a prospect of a remunerating crop. To new beginners I would say, imitate those farmers in your neighborhood who obtain the best crops."

"The condition of agriculture in this county has materially changed within forty years. The town in which I settled was a wilderness, and all that was necessary was to clear off the forest, and we obtained from thirty to forty bushels of wheat per acre.

Our present condition is different. We obtain now, rarely more than twenty bushels per acre. The decrease is owing to the manner of cultivation. Many farmers have been in the habit of planting their lands to corn, or sowing to oats, peas, barley, &c., in the spring, and after taking this crop off in the fall, immediately sowing to wheat; after this, peas or barley; thus taxing the land beyond its power of production; while others, who have pursued the more judicious course of sowing clover after wheat, and rotating their crops, are still getting from thirty to forty bushels per acre, if the season be favorable.

The soil of the most part of this county is peculiarly adapted to wheat, especially the southwestern part, in the vicinity of the plaster beds. Whenever we sow this crop in this region, if we sow after clover and use the plaster freely, we seldom fail of obtaining from thirty to forty bushels per acre.

The most judicious method, I think, is to sow to wheat in the fall, and the following spring sow from six to eight pounds of clover seed to the acre, with, perhaps, one and a half bushel of plaster. The next season after taking off the wheat, mow the clover the last of June, and plaster well immediately after, then the second crop of clover will start in time to fill well with seed, which will answer to mow early in September; from which crop, we get from six to eight bushels of seed per acre. The next spring after the taking off of the seed clover, we either plough and plant to corn, or let it remain and secure another crop of clover, about the middle of July; after which, we plough and sow to wheat. Frequently, however, before sowing to wheat, we roll the ground, and after letting it remain a few weeks we go over it with the harrow and cultivator, which well pulverizes the surface of the ground. The long tap root of the clover makes a fine dressing for the wheat.

Often of late, after sowing our wheat, we cover the ground from one to two inches with straw, which keeps the ground moist and protects the tender wheat from the spring frosts.

With respect to the best method of fattening cattle, I consider one bushel of flaxseed worth more than four bushels of corn, if properly prepared. I will give you

my method. I put six quarts of flaxseed into a five gallon kettle, and fill it with water, then hang it over the fire in the evening and let it simmer (not boil) all night. Set it off in the morning, and you will have a kettle full of jelly. With five or six quarts of this jelly mix the same quantity of shorts or meal, which an ox or cow will be exceedingly fond of, after eating of it few times. Any one will be convinced of this who has been accustomed to feeding oil cake. If the oil cake is worth three shillings per bushel after extracting six quarts of oil, what is the seed worth in the pure state?"

The agriculture of Cortland County is next noticed.

AGRICULTURE OF CORTLAND COUNTY.

"This is comparatively a new country. Within half a century it was one dense forest. The land which now sells for fifty dollars and more, were purchased for less than five dollars. We see in almost every part of the county evidence of well directed effort in the cultivated fields, comfortable dwellings, out-houses, public buildings, temples, seminaries of learning, and above all district school houses, which are the glory of our country. The general aspect of the county is uneven, though not mountainous. There is, properly speaking, no waste land in the county; no large bodies of water; no barren mountains, sterile plains or sunken swamps. The hills are capable of cultivation to their summits, and afford some of our finest grazing land. The county is remarkably well watered.

The soil best adapted to cultivation is a deep gravelly loam, well adapted to the production of grain crops and grass, the three great staples of agriculture produce. The state of agriculture in the county is such as might be expected in a new country. There are some well cultivated fields, but no well directed system of agriculture prevails. Many fields have been under the plough for a number of years in succession producing annually small crops of corn and other grains.

The most important question remains to be answered, viz: what agricultural changes are requisite?

A well directed system of convertible husbandry by which I mean a judicious rotation of crops, and proper attention to the making and application of manure. The annual production of all our tillage land may be doubled in a very few years, and the intrinsic value of the soil greatly increased.

An acre of good tillage land in Cortland county with thirty loads of long manure on a clover or grass ley, and properly cultivated, will produce eighty bushels of corn with as much certainty as forty in the common way, after other crops, and without manure. After corn, the root crop can be cultivated to great advantage, and without any detriment to the succeeding crop of spring grain, and after roots the ground will be in perfect order for the succeeding crop. After roots, sow spring grain, wheat, barley or oats, and sow grass seed and plaster with a liberal hand; and for two or three years you may expect three tons of good hay to the acre, and at the expiration of that time a good grass ley for an other eighty bushels of corn.

The culture of roots, in a stock county like ours, is of great importance. Cattle may be well wintered on any kind of coarse fodder, such as cornstalks or straw with a small portion of roots daily, better than they can on hay alone. Every farmer must adopt that system which best suits his soil and circumstances."

The agriculture of Dutchess County is next reported, in a very condensed and business like manner.

AGRICULTURE OF DUTCHESS COUNTY.

"The present state of agriculture is favorable, much improvement having been made of late years.

Dutchess county has some broken and rugged lands, but the aspect of the county generally, is very fine.

The soil is mostly gravelly and sandy loam.

The products are beef, pork, mutton, butter, cheese, eggs, poultry, hay, Indian corn, wheat, rye, oats, and wool; the last, is fast diminishing as a staple production.

New and improved modes of agriculture are taking the place of old modes.

The horses are mostly of English descent. Among this blood, the Duroc breed is in highest estimation. The best cross, is considered that formed by the French and English breeds; this gives the horse more constitution and hardiness, and consequently, less liability to disease, as well as greater endurance.

Horn cattle—The Short Horn Durham is preferred for milk and beef, but as working cattle, the Devonshire is thought superior; a cross of the two breeds is preferred by many.

Sheep—Formerly the fine woolled Merinos and Saxons were in vogue; but are now giving place to sheep of coarser wool, natives, Bakewells, and South Downs; the latter varieties being reared more as mutton sheep, which is considered most profitable.

Swine—This animal has been much improved within a few years, by the introduction of the English breeds, Berkshire, Norfolk, &c.

Cattle and sheep are, for the most part, fattened upon grass. More or less beeves are stall fed through the winters, and generally fed upon meal and roots. Some few sheep are also fed for the market during the winter. Swine are generally fattened upon corn, at least, the heavier pork; shoats on boiled feed, milk, &c.

Ploughs mostly in use, are the invention of a man in this county, by name of Chamberlain. Various other kinds are used.

The common square, four beam harrow is mostly used; others of late invention are getting into use.

Hay rake—The revolving rake is preferred, as decidedly the best.

Value of our lands, is from \$25 to \$120 per acre, by the farm; average price, about 60 dollars per acre.

The timber is mostly oak of different kinds, chestnut, hickory, and maple.

A diffusion of agricultural science would lead very much to advance the general prosperity of the county. To this source alone, may be attributed most of the improvements within the last few years."

Next follows the agriculture of Herkimer county.

AGRICULTURE OF HERKIMER COUNTY.

The experiment of Aaron Petrie, to whom we are indebted for the report on this county, in preserving and feeding broom corn to his stock is not new. The family of Shakers at Canterbury, N. H. and others, have long practised it and with great success. So have others within our knowledge.—Ed.

"The principal products here, at the first settlement of the country, were wheat and peas. They were marketed at Albany. Almost any kinds of tillage brought large crops, and little or no attention was paid to rotation. Crop after crop was taken off the soil, without any return to it, except such manure as was actually in the way. The soil of the interior is not so well adapted to the growing of wheat as the Mohawk lands, yet they raised some; but their principal products were barley, and the products of grazing. The barley business became large. Large malt houses were erected in different places, after the completion of the Erie canal, and it was sold to them. The lands of the whole county, with few exceptions, became so exhausted that farming was considered rather an uphill business. About 1820, the dairy business began to attract some attention in the northern parts of the county, (particularly cheese making.) All who adopted it flourished at once.

The principal products marketed in the eastern cities now, are cheese and butter. Among the principal products marketed here are wool, oats, barley, In-

dian corn, rye, hay, beef, pork, mutton, &c. In consequence partly of the large profits of dairying, the exhausted state of the soil, and the ravages of the weevil there has been little wheat raised in this county for several years past. We get our supply from the west. Our distillers and maltsters, have greatly diminished in number, and now import much of their grain from other counties and other States. The present condition of agriculture in this county is rather favorable. It is owing to the accidental improvement of our lands by the dairy business, and the profits of that business, to which our county is peculiarly indebted.

One-half of this county is yet a wilderness, most of which will probably in time be settled; but until the boundless, fertile west becomes nearly filled, settlements here must be very slow.

There is little attention paid to the breeding of horses here. Some years ago, the Archia breed of Virginia horses was introduced here, but experience taught us that a horse that can win a purse at a Long Island race, will not answer for a draft horse. I believe the Duroc and Messenger are the best breeds among us. The favorite breeds of cattle for beef are the Durham; but the general opinion is that they are not first rate for milk. There are comparatively few cattle raised here. In the spring of the year, large droves of cows are brought here from the eastern, western, northern and southern counties, and Canada. They are milked through the summer, and in the fall the oldest and poorest are partially grass fattened, and driven to the eastern markets.

The Merino and Saxon sheep have been the favorites of our wool-growers. The South Downs and Bakewells may now be added to the list of favorites. The Berkshire hogs are the best as yet introduced here, although there are others nearly equal to them.

Neat cattle and sheep are generally fattened for market on grass, and hogs are fattened on whey, potatoes, apples, grain, &c. There is much doubt whether it is profitable to fatten hogs or cattle on grain wholly.

There are several kinds of ploughs in use here. I have never seen any kind that would answer our purpose as well as Clute's old patent cast iron plough, and our plough makers should have continued making them; but they were induced to lay them aside by other patentees, and we must buy what we can get. We use the common three beamed harrow. The patent revolving horse rake is in general use here, but there are a few exceptions among those farmers who are so violently opposed to "improvement," in any of its forms, that they had rather, and do still have their wives and daughters use the hand rake in their meadows.

The general value of the improved lands of this county is from thirty to fifty dollars per acre. Some, however, is sold under thirty, and some, favorably located, over fifty dollars per acre. The prevailing timber is maple, beech, birch, basswood, elm, &c., and we are not without our pine plantings, hickory groves, and hemlock and cedar swamps.

Nothing will so advance the prosperity of this county, as a general agricultural education by our farmers, which we can now only acquire by taking an agricultural paper. Although there is much room for improvements, men will not adopt them until they are convinced, and that can only generally be done through the press. A great deal of the matter in our agricultural journals is not intelligible to the uneducated mind, which discourages their circulation. There is hope, however, that the rising generation, which is being better educated, will work the necessary reforms.

Allow me to mention an experiment of my own. The scarcity of coarse fodder, and the high price of hay, occasioned by the drought of last summer, induced me to gather a quantity of broom-corn stalks: I am now having them tried. We cut them with one of Green's "v" cutters, and feed them to cattle without

any other preparation. We have kept our cattle on them about two weeks, and I have full confidence in the success of the experiment. It may have been tried before, but is new to us here.

Silk Culture.

MR. EDITOR—I am much pleased with the favorable notice you have taken of the progress of the silk business.

I have been four years successfully engaged in producing silk, and am now making arrangements for entering largely into the business in 1843. My cocoonery is 20 feet by 60, two stories high, built expressly for raising silk. I have made 130 lbs. of cocoons the past season, and at a cost not exceeding the state bounty, which is fifteen cents per pound. The profit I shall realize will depend upon the demand for eggs next season, having need all my best cocoons for producing eggs.

I believe the silk culture is now firmly established among us, and only needs a general dissemination of facts, which any silk grower is capable of imparting, to induce the former to engage in this lucrative and pleasant employment. The erection of my cocoonery has awakened in the minds of my neighbors a spirit of inquiry which it is hoped will result in a careful investigation of the subject.

It is believed the number of silk growers will be more than doubled next season. I know of many who intend to build cocooneries, and many more who will begin in a small way, having become fully satisfied that it is the safest and most profitable employment which can engage their attention.

My cocoons are converted into raw silk on a reel of my own construction, which works admirably well. The art of reeling silk is found, after a little practice, to be very simple and easy. It requires a little patience by the inexperienced, but perseverance will soon overcome all difficulties.

A market is already open for cocoons and raw silk in various parts of the country, where the highest price in cash will be paid for any quantity that may be produced. To give you a specimen of what I have done, and to show you this is not "all talk and no either," I herewith send you a skein of sewing silk of my own raising and manufacture, which I wish you to examine, and if convenient, you may show it to your best judges of the article, and then let us hear their decision.

Yours respectfully,

JAMES W. CHAPPELL.

Lima, Sept. 15th, 1842.

We are happy to insert the foregoing, and should be glad to hear from others engaged in this business. Our columns shall in due proportion be heartily devoted to this object, which we believe destined to become a great branch of agricultural interest. The skein of white silk, which accompanied this letter, was very handsome and good. Some merchants and tailors to whom we showed it, pronounced it very good. One very competent judge said it was as good as any Yankee silk which he had ever seen; but that it was not even enough nor strong enough. We cannot expect to reach perfection at a single stride. There is no difficulty whatever in the way of our producing as fine and as good an article as can be made. The goal is already in sight.—Ed.

Plucking the Blossoms of Potatoes.

M. Zeller, director of the Agricultural Society of Darmstadt, in 1839 planted two plots of ground with potatoes. When the plants had flowered the blossoms were removed from those in one field, while those in the other field were left untouched. The former produced 476 lbs., the latter only 37 lbs.—*Farmers' Magazine.*



ROCHESTER, OCTOBER, 1842.

Apology—Disappointment.

This number of the Farmer has been delayed nearly a week, in expectation of giving some account of the Fair at Albany. The editor attended the Fair and was to have sent home a report thereof at the close—but nothing has been received from him, and we conclude that he sent a communication by private hands and it has miscarried. We can delay the press no longer, and our readers must submit to the disappointment, with our promise to make amends next month.—*Publisher.*

Important Notice.

Postponement.—The Monroe County Agricultural Society Show and Fair, to be held at Rochester, notified for the 14th and 15th Oct., instant, is postponed to Tuesday and Wednesday, 25th and 26th of October.

The preparatory meeting is to be held at the Arcade on the 15th inst. by adjournment, attendance upon which is particularly requested.

To the Friends of the Agricultural Press and the Subscribers to the New Genesee Farmer.

The subscriber respectfully announces that he has become the sole proprietor, after the first of January next, of the New Genesee Farmer, Mr. Bateham, the former proprietor, having, through ill health, retired from the concern. At the same time, he will continue the editorship as heretofore. He regrets to state likewise, that hereafter the annual subscription for the paper must be one dollar, payable in advance as heretofore. Yet his regret is not unmingled with satisfaction in the assurance, which he has already received from a great many of the readers of the Farmer, an assurance in almost every case volunteered, that such an alteration would be deemed by them equitable and would meet their active approbation. Possibly the approbation may be universal, and then he will be happy to learn that his regret was uncalled for. This would be a little too good to expect in a world where opinions are so various, where one of the strongest passions in operation in society, among men as well as the *kinder sex*, seems to be to get a thing cheap, and where the fact is too much overlooked, implied in a remark of the celebrated Madame Roland, that "she always heard with pain of any one's making a good bargain, because she knew in that case that some other person must have made a poor one."

This remark is but too applicable to the proprietor and editor of this paper; for to our subscribers, the New Genesee Farmer has certainly been worth fifty cents a year, to the farmers for wrappers and to their wives and daughters for curling papers, if such profane witchery in the vanities of this world has ever crept into their premises, while to the editor and proprietor, at 50 cents, its publication has been a serious loss. Wides as our circulation has been, that sum has not the present year covered the expenses; and without the subscription be increased as is proposed, the paper must go out; for no righteous master will require us "to work for nothing and find ourselves."

We respectfully ask our friends to look at the case with an eye of candor; and to sustain us, if we deserve to be sustained. We promise to do all that we can to merit their good will and their substantial

kindness; and we ask in return little more than the means of saving us from coming upon the county and being cast upon the tender mercies of Mistress Dumble.

We intend that our paper, on the first of January, shall be enlarged, and printed on finer paper and with clearer type; that it shall contain more miscellaneous intelligence of an agricultural nature than it has hitherto done; more information in regard to foreign and domestic markets; a greater variety of subjects connected with rural life and condition; the contributions of some of the best writers in the country whose aid is already engaged, and whose aid we need an increased subscription to secure by some just compensation, without which, we have not the face to ask nor the humility to accept, unless in our greatest straits; and we will spare no pains to make our humble sheet a welcome visitor in every farm house where it is permitted to enter; and that it shall not be regarded as an intruder even in a city parlor. We mean that it shall be, to a certain extent, the companion of the gardener as well as the farmer. We promise that the most delicate hands shall not be soiled by its touch, nor the hardest hand find occasion to cast it by in disdain. Wherever there are fruits and flowers, there we shall try to bring our baskets full decorated with the fairest wreaths which we can contrive. We will speak of the plants of the field, from the cedar that waves his proud head upon Mount Lebanon to the hyssop that climbs upon the wall. "Our talk likewise will be of cattle." We will gather around us the lowing herds and spread out the fleeces of gold. We will go forth in the spring to sow the precious seeds; and rejoice with the farmer at harvest home, when, by the blessing of the Lord of the Harvest, he returns in triumph, bringing his sheaves with him; and if, in doing this, we can so the infinitely more precious seeds of truth and virtue, and show the dignity of honest labor, oftentimes far outshining even in the shade the Imperial purple, and inspire and quicken the love of rural pursuits and rural pleasures; and open men's eyes and hearts to the beauties and glories of God's visible creation, to the abundance, the variety and the ceaselessness of his bounty, we shall be but too happy in the delicious consciousness that we have not labored altogether in vain.

We ask our friends to aid us in this attempt. A life not short has been given, as far as other obligations would permit and justify, to the cause of an Improved Agriculture, and especially to the elevation and improvement of the agricultural and rural classes. In what we have done for this cause we have no regrets and no misgivings. We believe it to be under the blessing of Heaven the cause of human happiness, of good morals, and of religion, and we rejoice in the deeper and still deeper hold which it seems to be every day taking in the public mind.

We extend to all our coadjutors and brethren in the agricultural press the hand of cordial friendship. We do not promise that our paper shall be better than theirs, or even as good as any of them; but we promise only to do our best to make it worthy of being read. Such is the cheapness of agricultural papers, in former times altogether unexampled, that a subscription to several of them would create no burdensome tax, nor occasion an expense which any farmer would find it difficult to save from many useless purposes upon which it is now inconsiderately squandered. Devoted to this purpose, it can scarcely fail to do good.

We ask those of our subscribers, who purpose to continue their patronage, to make as early remittances as their convenience will allow. This post-masters will kindly forward them. To those persons who will act as agents, we promise the most liberal terms.

Our arrangements, when fully completed, will be announced in our next number.

Respectfully,

HENRY COLMAN.

Rochester, 1st October, 1842.

Monroe County Agricultural Society Awarding Committees.

The following is the list of Judges or Awarding Committees, appointed for the Cattle Show and Fair to be held at Rochester on Tuesday and Wednesday, the 25th and 26th inst. It is earnestly desired that the gentlemen will all consent to attend to the duties assigned them, and that they will be present at an early hour on the day of exhibition.

On Horses—Dr. F. F. Backus, Rochester, Abram Voght, Victor, Wm. Read, Wheatland.

On Bulls, Cows and Heifers—Wm. Garbutt, Wheatland, J. Allen Frost, Rochester, Jirah Blackmir, Wheatland.

On Oxen and Steers—Wm. Fixley, Chili, Cornelius De Witt, Gen. T. Brown Wheatland.

On Sheep for Fleeces—Mills Landon, Ogden, Daniel McNaughton, Wheatland, J. H. Robinson, Henrietta.

On Sheep for Carcass—Jacob Thorn Rochester, H. Schenck, Brighton, Benj. Birdsall, jr., Mendon.

On Swine—Jesse Harroun, Ogden, Alfred Fitch, Riga, M. Parsons, Brighton.

On Ploughing—L. B. Langworthy, Greece, Jacob Strawn, Chili, C. F. Crosman, Rochester.

On Butter and Cheese, Sugar and Honey—C. M. Lee, Rochester, Elibu Kirby, Henrietta, M. Garrett, Gates.

On Silk, Domestic Cloth, &c.—Lewis Brooks, Rochester, Caleb K. Hobbie, Irondequoit, Henry Martin, Clarkson.

On Horticultural Productions—N. Goodsell Rochester, H. N. Langworthy, Irondequoit, J. H. Watts, Rochester.

On Non-Enumerated Articles—Alex. Kelsey, Rochester, N. Haywood, Brighton, William Otis, Gates.

Committee of Arrangements—L. B. Langworthy, H. M. Ward, M. B. Betcham, P. Barry.

(For the Winter Meeting.)

On Grain and Grain Crops—L. B. Langworthy, Greece, Abram Colt, Mendon, Henry Calman, Rochester.

On Roots and Root Crops—Wm. Garbutt, Wheatland, Stephen Legget, Henrietta, Zera Burr, Perinton.

At the last meeting of the Society, it was

Resolved, That the awarding committees on animals be instructed to require the competitors for premiums, to give certificates of age, pedigree, food, work, &c., according to the 4th section of the Regulations published with the list of premiums.

It was also *Resolved*, That the President be requested to deliver an address to the Society on the day of the Fair.

Also *Resolved*, That the time of holding the Fair be on the 25th and 26th of October, instead of the 13th and 14th.

Further *Resolved*, That the officers of the Society and members of Town Committees, and others, be requested to meet at the Arcade Hall, Rochester, on Saturday, the 15th October, at 11 o'clock, for the purpose of devising ways and means.

Agricultural Addresses.

This number of the Farmer is issued during the absence of the Editor, and the publisher takes the responsibility of announcing, that, by the request of the several Societies, Mr. Colman has agreed to deliver addresses at the approaching Fairs in the counties of Cayuga, Seneca, Ontario, Monroe, Genesee and Niagara, and perhaps at one or two other places.

*From Colman's Second Report***Experiments and Improvements.**

The improvement of agriculture, as a science and an art, depends greatly upon facts. Experiments, illustrating what can or what cannot be done, are of great value. Farmers object to agricultural experiments, as involving expenditures beyond their means; but an experiment on a small scale, within the means of the humblest farmer, may be as instructive and conclusive, in reference to the point sought to be ascertained, as an experiment of an extended and expensive character. The point to be mainly insisted upon, and that, in which farmers commonly fail, is exactness of observation. Without this, no experiment is of any value. In this matter I have been so often disappointed, that my impatience, I hope, he excused, when I urge upon farmers attempting, or at all disposed to attempt, experiments, to pay the most pointed attention to the mode of conducting them; their progress; the circumstances under which they are begun and carried on; and their actual results.

I believe it must be admitted, that there is no class of men of business so little attentive to exactness, in all their operations; and none more ready to draw hasty conclusions, or to deal in what are mere guesses, than farmers.

I certainly design no disrespect to the farmers, when I give an example of a conversation to which I am too often a party. Indeed I should be almost willing to give offence, if I could by any means induce to more precision and carefulness.

Thus: if I ask a farmer, if he has used lime on his land or his crops? he answers, yes. In what quantity to the acre? he did not measure the lime or the land. Could he see any difference where he limed, and where he did not lime? he limed the whole field equally. Did he apply it with or without manure, single or in compost, or did he apply it to a part of the field with or without manure? he applied it to all parts of the field in the same way. Did he perceive any good effects upon the field thus limed and manured? yes. How were these effects ascertained? did he measure the crop? no, he measured nothing, but he was of opinion that the land was benefited by the application: he thought there was a difference in the result from what would have been, had it not been limed. But was this difference attributable to the lime or the manure? it was all limed and manured alike; but he supposed it was the lime. I might go on, but this will suffice. This is a true account of the manner in which my inquiries are often answered; and shows how what farmers call experiments are often conducted. But can any thing be plainer, than that by such experiments no certainty is reached. Whether any advantage was obtained from liming alone, or liming with manure, cannot be determined, because the field was all served alike, and there were, therefore, no means of comparison. Again; if the crop is not measured and compared with a crop not thus manured, how can it be determined what has or has not been gained? Again; if neither part was served with lime alone, and neither with manure alone, and neither part separately from the part with lime and manure in combination, how could any thing be determined in regard to the comparative value or use of lime or manure singly or in conjunction? Then again, if any thing has been effected, yet, if nothing has been measured, neither lime, nor manure, nor land, nor crop, how can it be ascertained what has been done, and its efficacy or utility is to be accredited to the lime?

I state this case, which is not in any respect exaggerated, to illustrate the difficulty of arriving at correct results solely from the neglect of intelligent and exact inquiry and experiment. But I shall be an-

swered, that it would be too much trouble to be as exact and particular as I propose. This is an answer which an inquisitive and intelligent farmer, if he means to respect himself, will be very shy of giving. In most cases, however, it costs scarcely more pains to conduct and observe an experiment with exactness, than to do it in the uncertain way in which it is commonly done. But in the latter case we may be properly said to determine nothing; in the former we reach the object of our inquiry, which is generally much more than a compensation for any pains-taking it may cost us. But in no matter whatever is knowledge of any substantial value acquired without labor and careful inquiry. We might as well complain that we cannot obtain the harvest without sowing the seed, and tending and cultivating the growth. But the constitution and laws of the divine providence in these cases are inviolable, and not to be turned aside for our convenience or indolence; and as far as concerns man's moral benefit, the benevolence of this unchangeableness corresponds with its infinite wisdom.

For the New Genesee Farmer.
The Orchard.

The cultivation of good fruit is of such importance to the farmer, that it cannot be too often nor too strongly recommended to his attention. I have lately travelled through a considerable portion of the country, and have taken some pains to ascertain the quality and condition of the orchards particularly. I have found many excellent apple orchards, loaded with the finest varieties of fruit, but these would not average one in fifty.

The greatest number are of the most worthless character, and the trees miserably taken care of.—Suckers are growing up for several feet around the trees, and the heads or tops have never been pruned or thinned out. This neglect would in a few years deteriorate the very best of fruit.

Besides the neglect with which Farmers themselves have treated this subject, there are other causes to which the scarcity of good fruit may be very justly ascribed, viz: the peddling of apple trees around the country by persons possessing comparatively no knowledge of fruit culture themselves, and caring as little, if they could only make a profitable business of it. The practice of such persons, I find, has generally been to recommend such kinds, whatever they might be, as they had in greatest abundance.

Extensive frauds have been practised throughout the whole country, by persons who make a business of engrafting. They generally represent their scions as some of very excellent and popular kind, when in fact they know nothing of their character whatever. Scarcely a farmer with whom I have conversed, but has been thus deceived. These gentlemen and their scions are well worthy of notice.

Every person who plants a fruit tree, or propagates one in any way, should spare no pains to get the best kind, and from a reliable source. No confidence should be placed in these itinerants who have no character at stake, for disappointment will be the result in nine cases out of ten.

Pears, plums, peaches and cherries, are ten fold more deficient than apples. There have been very few, if any, good pears in market this season; those that have been brought in, have sold at \$2.25 to \$2.50 per bushel; but you might travel 20 miles in many parts of the country, and not find a single pear tree with fine fruit in use at this season. Plums are plenty, but of poor quality, and mostly the common blue. The green gage is to be found in many gardens; some fine yellow eggs, and Huling's superb, and Bolman's Washington, &c., have been selling at 12½ to 25 cents per quart, while the common sorts would scarcely sell for so much by the bushel; and so with

peaches; fine, large, good flavored peaches command \$2 per bushel, while the great bulk of those brought to market, are sold for 37½ to 75 cents. In fact, persons who have been in the habit of eating fine peaches, would scarcely consider the great bulk of those that come to market at all palatable. Such fruits only encumber the ground, for they will never sell for enough to pay for picking them.

Quinces are well worthy of cultivation, and yet are exceedingly scarce. This region is well adapted to their growth—they bear abundantly wherever they are to be found, and sell readily in market for \$1.50 to \$2.50 per bushel.

The cultivation of the small garden fruits, such as strawberries, raspberries, currants, gooseberries, &c., is much neglected; they are easily procured, easily cultivated, and add greatly to the comforts and luxuries of the family board, at a season of the year when fruit is generally scarce. P. B.

Transplanting.

The fall is decidedly the best season for transplanting all kinds of hardy trees, though this is contrary to the general opinion throughout the country. Many say they have never succeeded as well in the fall as in the spring. The reason of this is that their fall planting has not been performed in due season. If trees are carefully planted and secured from being blown about by the winds, any time in the latter half of the month of October, or the first week in November, they will gain nearly a year's growth over those planted the following spring. Besides the spring is always a busy season with the farmer, and the planting of trees, shrubs, &c., if deferred till then, is too frequently forgotten entirely.

Persons who intend planting orchards or making improvements around their dwellings by planting ornamental forest trees and shrubs, &c., should avail themselves of the very earliest period of the present month suitable for doing so. It is also the only proper time for transporting trees, &c., to the interior of the country. Trees can be carried safely by canal to the most distant west, if shipped early; in spring it is quite impracticable, as vegetation is invariably too far advanced before canal navigation commences.

Many persons possessing a heavy clay soil, have become quite discouraged from their trees dying year after year: several have told me that it is no use for them to plant more, as they will not live. The difficulty is, they have taken no more care in planting than is requisite in the finest sandy loam.

In stiff adhesive soils, the subsoil should be dug out at least one foot deeper and two feet farther in circumference than the roots of the tree require, and good friable surface soil filled in; and the surface should be kept as well hoed as a flower border, during the first year at least after planting. Let those who have a heavy clay soil, pursue this practice and they will be successful. P. B.

Orchard Caterpillars.

Attentive observers will doubtless have noticed that these insects have been on the increase for a year or two past, and it would be well if effectual measures were taken to destroy them while their numbers are yet small. The perfect insect deposits its eggs, during the latter part of summer, in the shape of belts or cylindrical rings on the smaller branches and near their extremities. These rings are then covered with a resinous substance which excludes moisture and they remain uninjured till the following spring, when the young caterpillars hatch, grow, and devour. Each ring of eggs produces a nest of caterpillars.

At this season of the year, these nests of eggs are easily seen, and if cut off and burned, the operation will save the more troublesome task of destroying the insects next spring, and at a season when less time is allowed for its faithful performance. J.

We have received from a respected correspondent in Michigan, several articles on the subject of a Tariff for protection. Our correspondent shows only one side of the question, and that certainly not the most popular. The true wisdom is to hear both sides. We certainly shall admit no articles properly speaking of a partizan character, but this does not preclude the fair discussion of a subject so intimately connected with the agricultural interests of the country as this. Our own opinions on this subject have been very fully and frankly given; but we are not the less willing to hear the opinions of others for having made up our own; nor to changing or amending our opinions, whenever we see reason to change or amend them. It may be said that Congress having adopted the protective policy there can be no farther reason for the discussion. This certainly, in a government where any laws may be altered or amended, does not apply; and the subject being no longer a matter of doubt and struggle, may therefore be examined the more calmly. Our columns will be as open to the arguments on the one side as the other, and we invite discussion so far as we have room, without interfering with favor of more general interest. Our friend having favored us in this way, will, we hope, do more for us in some way more directly practical.—Ed.

For the New Genesee Farmer

PROTECTIVE TARIFF.—No. 1.

MR. EDITOR—Of several subjects on which I wish to express my views through the medium of the "Farmer," the one foremost in my mind at present, is the subject of the "Home League" or Protective Tariff; from the fact, that hardly an Agricultural paper comes to hand but that contains more or less argument in favor of that object.

I propose to examine, in a cursory manner, several of the arguments in favor of Protective Duties; as they occur in my daily intercourse.

If my views are incorrect, some of your valuable correspondents will be able to convince me of my error through the same medium; and if my positions can be refuted by sound logic and experience, no political bias shall deter me from acknowledging my error. I have no other object than my own information and the promotion of the best interests of the farmers of America.

In the first place, I would state, that I am in favor of "Free Trade" in its literal sense, and opposed to a Tariff for Protection, as a general policy. I consider it nothing more nor less than indirect taxation; but I cannot see why we may not as well or better (under present circumstances,) be taxed for the support of Government in that way as any other.

I am therefore in favor of a *Discriminating* Tariff exclusively for revenue, sufficient for the support of our Government, administered upon principles suited to our Republican Institutions.

What I mean by discrimination is, that the duty should be levied in such a way as to collect a revenue and not oppress the laboring classes. I hold it to be unjust to tax the poor man as much as the rich, for the support of government, by way of a duty on necessary articles, of which the poor individual consumes as many or more than the rich one. For that reason, I am decidedly opposed to a uniform ad valorem duty on all imports. I have no objection to any incidental Protection that may be afforded by a Tariff for Revenue founded upon correct principles; but there is a material difference between a Tariff for Revenue and one for Protection "proper." They are directly opposite in effect.

A discriminating "Tariff for Revenue," if judiciously laid, would not wholly prevent foreign competition, or materially enhance the price to the consumer, but would rather have a tendency to keep up an equilibrium of prices, and encourage legitimate commerce, in opposition to prohibition and smuggling.

It is obvious, if an article is prohibited, there can be

no revenue derived and no business left for commerce, except by smuggling. Unless we import something, we cannot expect to export our products to any extent whatever. Whereas the object of a Tariff for the "protection only of American Manufacturers," would be to prohibit importation, and thereby cut off the government Revenue, and materially enhance the price of goods to the consumer.

I support the "Home League" so far as it goes in discouraging, by way of practice and example, the use of all foreign "gaw-gaws" which are useless or injurious to us as a nation; on the same ground that I would support a temperance society, but doubt the expediency of special legislation in favor of either subject.

I am not opposed to the refinements of life, (such as do not enervate the faculties,) nor to the moderate use of luxuries, providing that we limit our expenses to our income, after providing for the common casualties of life. I do not wish luxuries prohibited, but admitted on such terms as will collect the greatest amount of revenue. Their moderate use is far preferable to a miserly, Shylock disposition, as it has a tendency to keep down overgrown wealth, and distribute the means among the many.

All the civilized nations of the earth have latterly turned their attention more to commerce, and the production of the necessities and luxuries of life: In a great measure, the "swords have been beaten into plough shares and the spears into pruning hooks." We are in the commencement of a new era, and Heaven grant it to continue and progress!

If peace should continue and the earth bring forth bountifully, and pestilence not walk abroad, nor anarchy prevail, all the nations of the earth will produce more than the whole world can consume.

What is to be done with the surplus, is a subject to be considered. It was calculated before the great improvements of the day, that active employment of every individual four hours each day, would produce all the necessities of life. The facilities for producing have increased in a short time an hundred fold; by the use of steam, the improvement in labor-saving machinery, and the application of science to agriculture and the arts. If this desirable state of things continue, who can calculate the immense surplus that would accumulate, under the present rate of consumption, in half a century to come? To my mind, low prices are inevitable.

The great strife among civilized nations, at the present time, is for the ascendancy in commerce, and the facilities of production; and lamentable to contemplate, that, with perhaps one solitary exception, the leading motive that impels them onward, is the aggrandizement of the few, and the consequent oppression of the many. But the tendency of *moral reason* is in the ascendant, and it will ultimately prevail over mere force—but before that is fully consummated, all these systems of government founded in oppression must crumble to dust. I sincerely wish the revolution may be bloodless, but come it must—the vengeance of Heaven will not always be "stayed" upon the heads of those nations that work and starve their population to death, under a wicked pretence of "protecting their industry."

I shall endeavor to show by argument, in my next number, that a *Protective Tariff* is decidedly opposed to the best interest of the farmers of America and the nation at large.

I anticipate that some of your readers may consider the discussion of this subject as out of place in an agricultural paper; on the account of its being ultimately connected with party politics.

I consider it a great National Question, (not necessarily a party one,) and one that concerns the farmers as much as or more than any other class of producers, and as such, I shall endeavor to treat it—wholly regardless of party considerations.

Monroe, Mich., 1843.

J. S. DUTTON.

Protective Tariff.—No. 2.

I propose now to examine the argument adduced in support of a Protective Tariff. The friends of the measure maintain that it will be beneficial to the whole community, from a great contrariety of reasoning.

First, it is asserted by some of the advocates of protection that a duty does not increase the price to the consumer, but merely collects the government revenue out of the foreign producer.

Can any man maintain that the corn laws of England operate in that way? Must they not admit that when those laws exclude our products from the English market, at the same time they cut short their own revenue, and also that the said laws are an oppressive burden upon every class of community except the privileged land holders.

I would ask further, why do the American manufacturers manifest so much anxiety on the subject of protection? Why are we told that unless the duty is raised that the majority of all the manufactories will be compelled to stop business for want of sufficient profits to sustain them? And how can the profits be increased on the manufacture of a ton of iron, or a piece of coarse woolen, or a paper of pins, (by a tariff) unless the prices are raised by it? The fact is, and it admits of no cavil, that the prices are raised by duties, and if they were not, manufacturers would derive no benefit whatever from a tariff; it would be all the same to them whether there was a duty or not, and the manufacturers themselves concede the argument and admit the principle, when they "resolve that a duty upon the raw material is a tax upon the manufacturer."

Another reason set forth in support of a protective tariff is, that by protecting the manufacturer you incidentally protect the farmer, or in common parlance it is called, "building up a home market," which to my mind, is a subtle, deceptive *cant phrase*, that has caused more delusion among the producing classes than every other in the tariff calendar. What! the manufacturers of New England consume all the surplus of this "mighty West!" They could not do it if they were fifty times as numerous; but I am admonished that declamation proves nothing, so to the argument of logic, fact and figures, on which I rely to sustain my views.

They admit that although the farmers at first would have to pay a little higher price for all the goods they consume, yet it would enable the manufacturer to make larger profits than they now do, and the result would follow that a portion of those farmers who are now engaged in agriculture would abandon their business for that which was more profitable; consequently, by the operation of the inflexible laws of trade (supply and demand on less competition,) the farmers would obtain an equally enhanced price for their products.

I am not prepared to say the position is wholly groundless and that it is not a true one to a certain extent in most cases; but let us examine the practicability of the argument in this case. By referring to the last census, we find that there are five millions of persons actively employed in the different pursuits, and that 10 per cent, or five hundred thousand of that number, are engaged in trades and manufactures of every description, and that the whole amount of manufactured goods produced in the United States for that year, was estimated to be worth \$395,832,615, and that the aggregate amount of like manufactured goods imported, amounted to \$51,145,711. Now by applying simple proportion we shall find the result. If 500,000 persons, by the use of machinery, produce \$395,832,615, how many persons will it take to produce \$51,145,711, the amount imported that year? Answer, 64,610 men, women and children.

Is it not obvious then, that if the whole number o

persons required to perform that amount of work were to be taken exclusively from the agricultural community, that there would still remain a number sufficient to produce an immense surplus of agricultural products? Every individual may form his own conclusion what number of those persons would be abstracted from among the present number actively engaged in agriculture, if we were to commence and manufacture every article which we now consume. My own judgment is, that it would not lessen the present number of agriculturists sufficient to produce one million of dollars less than we now do. It must be borne in mind, that manufacturing is mostly carried on by the use of machinery, and the employment of females and children, who could not be employed in agriculture generally, under any circumstances whatever: so that in any view of the subject, the conclusion is certain that America must necessarily produce a great surplus of agricultural products; and as long as we have a surplus, we must depend in a great measure upon a foreign market to establish the price; consequently a high tariff would not raise the price of "bread stuffs" here, but would rather have a tendency, in my judgment, to depress prices, as it would deprive foreigners of the ability to purchase our products by excluding their manufactures from our own market.

Every nation that sustains a commerce, must necessarily produce a *surplus* of some kind; and sound policy would dictate that government should encourage the production of such articles as we can produce to the best advantage, as compared with those nations with whom we exchange products; or at least, that government should place no restriction or impediments in the way of raising those products by burdensome taxes in order to encourage or build up some other interest or business which we as a nation cannot prosecute to the same advantage. Now in what consists the great natural advantages of the United States if not in agriculture, emphatically agriculture, and does not every man respond to the sentiment? Is it not the great balance wheel of our republican institutions and government itself? whilst extensive manufacturing, in the nature of things, is incompatible with the equal rights and equal privileges of a Democratic Republican Government. Manufacturing requires concentrated capital, and creates a great distinction between the employer and the employed; and those two things combined, ever have and ever will oppress the many in every land where they existed; and I religiously believe that no nation of people, whose leading business was decidedly manufacturing, ever did or ever can support a Republican form of government.

Entertaining these views, I am decidedly opposed to the agricultural interest being made of secondary importance and subservient to all others. The natural tendency is to drive all men who have mental energy and active business habits into other employments, which is one cause why the farmers, as a class, are considered by many inferior to the merchant or manufacturer.

I am confident that the farmers work harder, live cheaper, and receive less at present for their labor and capital invested, than the merchant or manufacturer, or even less than they will under the tariff, according to the "compromise act," and I think that the farmers require protection more than the manufacturers, and are at least as much entitled to it as they are.

But they tell us that hard work and plain fare is conducive to health and sound morals; that our sleep is sweet and we are not troubled with Bank debts, and the headache after a night's carousal. I have no doubt that they think extravagance in dress is a great sin in a farmer's family, but not so much so in a merchant

or large manufacturer; and what is that but the doctrine of all monarchies and a sure way to build up and perpetuate a privileged order. Now I claim for the farmer, after producing his share of the wealth of this nation, as much leisure time for the cultivation of the intellect, or to be appropriated to pleasure, as any other class of producers; but such is not the case at present; and I call on the advocates of protection to give the farmer "protection" direct—give us a bounty of 20 per cent on all the products which we export, (that would be perfectly consistent with the doctrine and practice of "protection"). The farmers have the same argument to offer that the manufacturers have; namely, that a portion of those persons at present engaged in trade and manufactures would then engage in the more lucrative business of farming; and then by the operation of the same laws of trade, (supply, demand and competition), merchants and manufacturers would obtain a higher price for their goods than they now do.

I have no doubt that supply and the demand, as a general rule, establish the price of all our staples. The doctrine must be considered good in a healthy state of trade; but sometimes the spirit of monopoly, through and by the instrumentality of a *credit system*, subverts all those salutary laws; I offer, therefore, for the consideration of the farmers, another proposition to raise the price of their products,—suppose they spend a portion of their time in ornamenting their grounds with fruit trees and shrubbery: produce less in quantity at a greater per cent profit, by cultivating less land—not forgetting the most important of all culture, the *cultivation of the mind*—and my word for it, they will, as a class, be in better circumstances in a short time than they will be with a "protective tariff," or to continue on in a system of overproduction. To ensure the more we produce the more we enrich the nation at large; (as it certainly will be exported when at very low prices here,) and furnish cheap bread for the mechanic, the merchant and the manufacturer. At the same time when we produce a large surplus, we lessen our own profits, while they in their turn, are not willing to come down to our profits, but are calling on government to protect them by giving us high priced goods and manufactures.

J. S. DUTTON.

Monroe, Mich., August, 1842

Agriculture in Russia.

The estates are estimated by the number of souls upon them, taking into account the *male serfs* only. This is an ancient custom derived from the old times, when the revenues depended upon the number of hands at the disposal of the owner. At present the case is changed; the land is the source of the profits, while the serfs are a dead weight upon the proprietors. The custom of the country is to allot to the peasants the half of the land which belongs to the owner of the estate, to defend them against all aggression, and to respect their property with strictness.

With these means and this order of things, the peasant is by no means in a bad condition. His habits and desires are, owing to his want of civilization, simple in the extreme. But were his wishes enlarged, he could easily gratify them; land, and the time to cultivate it, are at his disposal. A village of 200 souls, (i. e. male peasants of all ages,) possesses usually 2,000 acres of productive land. Two hundred souls are usually reckoned to furnish 80 laborers, women and men; for the wives toil as well as their husbands. These work 3 days in the week for their master, who gives up to them in return, the half of his land.

The system of agriculture is triennial, with fallows: that is, the land bears two crops in three years. Each married couple receives two acres in each of the three portions, i. e. winter grain, spring crop and fallow, into

which, by this system, the arable land is divided so that they have in all 6 acres, in addition to one acre of meadow and one also of pasture: besides this, they have the ground for a house, garden and out-buildings; by way of rent for their allotment, the peasant and his wife are required to cultivate as much more for their master.

The fine season being very short, the operations of husbandry are performed with surprising activity. The vast tracts covered by abundant crops, are quickly barred, and the produce is heaped up in open barns. In winter the grain, consisting of rye, (the staple food of the country) wheat, barley, oats, pease, millet, and buckwheat are threshed, usually with the flail, but sometimes with a Scotch threshing machine, and it is then transported into the towns—sometimes to a distance of 100 or 200 versts, that is 67 or 134 miles. The straw is consumed by the cattle, and is also used in the steppes, where wood is scarce, for heating the stoves. There is, however, often a surplus, which is employed to make fences for gardens, or embankments for ponds and marshes. The roads and highways not being stoned, the immense transports of produce can, generally speaking, only be made in winter on sledges; if it ever takes place in summer, it is effected by means of oxen, the keeping of which costs nothing, since the road itself supplies them with pasture, for it is not less than 210 feet, or 30 sagines wide, and all as green as a meadow. A few ordinary sheep, pigs, poultry of all kinds, and one or two cows in addition to the horse of a very sorry kind, complete the live stock of the peasant, and help to consume the produce of his land, which he cannot sell at any price, however low, on account of the distance of the markets. In a year of plenty, the different kinds of corn become exceedingly cheap, and are consumed with a reckless improvidence, since no one thinks of laying any thing in reserve. And this will explain the terrible deaths which sometimes visit Russia.

Every peasant cultivates for his master and himself, in addition to the fallow, eight acres and mows two acres of meadow. Every acre, in a plentiful year, gives not less than ten measures, termed chetverts, of grain, equal to 216 lbs. An opinion can, therefore, readily be formed of the immense quantity of the produce annually raised in Russia, of which more than one half remains on their hands, owing to the lowness of the price and the prodigality of the consumption. Two or three successive years of good crops overload them to the greatest possible degree; and the storehouses are not capacious enough to contain the corn raised, the more so, as buildings of all kinds, from the scarcity of stone and wood, are expensive.

However full of grain of all kinds the storehouse may be, it is utterly impossible to check the production—they cannot dismiss their laborers (serfs) when they do not want them, as if they were hired laborers. And in spite of the superabundance on hand, they must continue to produce, were it only by way of employment. In fine, the result of this state of things is an extreme lowness in price of all articles, almost below the cost of production. Witness the following prices of produce at Tamboff in November, 1837. Meat from 1 to 4 cents per lb.; Rye, per chetvert, 87 1-2 cents; Potatoes, 15 to 20 cents; Fat Turkeys, per pair, 43 cents; Geese, per pair, 58 cents; Fowls or Ducks, per pair, 30 cents; Flock Game, 24 cents; Gelinottes, 40.

Tomatoes a Cure for scours in Pigs.
Last fall, we had a pig that was taken with the scours badly. We tried various remedies for it with but little effect. One day we threw over to it two or three tomatoes, which it ate readily, and which we found gave it relief. By following this course a few days, it was finally cured.—*Alma Farmer.*

Indian Corn.—The first severe frost of the season occurred in the vicinity of Rochester on the 23d Sept. The largest portion of Indian corn was beyond its injury.

From Colman's Second Report.

Shakers' Establishments.

In a survey of the Agriculture of Berkshire, it would be inexcusable to pass over these establishments.

1. The Family at Tyringham consists ordinarily of one hundred members. The farm is understood to contain more than one thousand acres, principally situated on the side of a high hill, and running down into the valley, where it is crossed by the small stream called Hop brook, which empties into the Housatonic river at South Lee. The view from this eminence, as the prospect extends towards the northwest, embracing the village of Lenox, "set upon a bill," with the whole intervening valley of a diversified aspect and luxuriant soil, the little manufacturing bee-hive of South Lee, and the many rich summits every where scattered in the background of the picture, their tops and sides fringed with the chestnut and the rock maple; and the noble pile of Saddle-Mountain lying in the distant perspective like a contemplative giant in his repose, is among the most beautiful of those enchanting views, which are constantly opening upon the traveller, in this picturesque region.

The principal object of their farming, at Tyringham, is the raising of stock; neat cattle especially. Their dairy is well managed; and they have a garden of four or five acres, devoted to the raising of garden seeds and medicinal herbs, under skilful and successful cultivation. Their annual sales have sometimes amounted to \$3,100; and they allow to their agents twenty-five per cent. commission on sales, and take back what is unsold. They produce some wheat, corn, and oats; and they are now effecting with great labor and admirable skill, the redemption of extensive alluvial meadows on Hopbrook, by draining, rooting out the stumps, and cultivating the soil, which will bring those lands under a course of most productive improvement.

Of the religion of this peculiar people, it is not for me in this place to speak. A religion which holds the severest restraint over appetites and passions ever liable by their excesses to lead men astray, which encourages industry, frugality, mutual love and kindness, and that which is certainly not lowest in the scale of virtues, the most exemplary neatness and order in every thing, is so far entitled to respect and commendation. Under whatever aspect we view it, we have at least occasion to congratulate ourselves, that we live under a government tolerant to every honest difference of worship and opinion; and to remember, that the same principle, which secures freedom to ourselves, should guarantee to others a like boon.

2. The establishment of the brethren at Pittsfield and Hancock, consists of about seven hundred acres, lying together; and is possessed by three large families, containing upwards of three hundred individuals. They are united for all the general purposes of their society; but in their financial concerns are as families separate from each other. The land is not of the best description, being low, cold and wet; and their attention is mainly directed to the cultivation of grass and garden seeds, and the keeping of cows and sheep. Their first purpose is for their own supply. They raise the best they can, and they eat the best they raise; and though from their temperate and careful habits their thrift is remarkable, yet the accumulation of property is evidently not a principal object with them. They have various mechanical contrivances by which their labor is abridged or lightened. They have made the best use of the water power which their place furnishes, and husband it with care and economy. They have an extensive saw-mill carried by water, and all their fuel is cut in the same way. A simple arrangement which it may appear

trifling to mention, impressed me by its shrewdness and good judgment. Ordinarily, fire wood is piled horizontally, and when exposed to the weather, becomes water-sunk and mouldy. Their billets of wood being sawed were stacked up in convenient piles, the sticks being placed upright on the end, so that any water which fell upon the pile was immediately drained off. After being sawed they were neatly put up under cover.

I have already referred to their magnificent barn, built of stone of a circular form, three stories in height, ninety-six feet diameter, and capable, as well as may be calculated, of containing from three to four hundred tons of hay. The carts enter in the second story; the floor or drive-way is continued round by the wall for the whole of the circle, so that the cart passes round the entire distance, and when the hay is discharged, goes out at the same door at which it entered. All the hay is deposited in the centre. Several loaded wagons may stand in the floor, and be sheltered and unloaded at the same time.

The roof is a beautiful and curious specimen of carpentry; and appears to be most securely supported. In the centre of the floor, there rises to the apex of the roof a single column as large as an admiral's mast, around which a hollow frame of slats is fixed, and which serves as a ventilator or chimney to discharge the steam of the hay. It is open at the top, and protected by a small cupola against the rain. At the same time the hay is raised from the ground, about a foot by an open floor of slats, so that there is, while the hay is new, a constant circulation of air up this chimney; and one of the friends informed me, that the steam passing from the hay in this mode was oftentimes so dense, that, to use his own expression, "you could wash your hands in it." The arrangements for the cattle are in the lower story, where every animal has its place and number, and where every cow is designated by a label on the post as in milk or otherwise. In this circular form, there is of course a considerable loss of room; yet the method of feeding is easy; the place is kept clean; the whole arrangement is convenient; and the kindly treated animals standing around this huge mass of hay, have at least the pleasure of seeing the good things in store for them. These friends have singular advantages, in the amount of labor which they are able at any time to command and apply to any object which they have in view; and their establishment presents a beautiful illustration of the advantages of well directed industry, neatness, and order. The great rule of domestic economy "a place for every thing, and every thing in its place," is no where more strikingly exemplified; and though they make no pretensions to the fine arts, and have little of what is called taste, yet all their arrangements, and the products of their labor, exhibit the proofs of tidings, permanency, utility, and substantial comfort.

Their dairy is exquisitely neat in every part of it. Their piggery is the exclusive concern of a single individual; and illustrates the utility in a large concern of a division of labor and of individual responsibility. They have attempted an improvement of their neat stock, by the introduction of some of the improved breeds, and the young stock which they were raising from this cross, promised extremely well, though no opportunity had been had to test their qualities for milk. Their land is considered in a great measure unfavorable to the production of grain; and a large portion of their bread stuff therefore is purchased. They have likewise occasionally hired extensive tracts of meadow on the Mohawk river in the state of New York, which they have cultivated by colonies, in order to obtain brush for the manufacture of brooms, a branch of business which heretofore they have carried on to a con-

siderable extent. They keep a large flock of sheep; and all their woollen fabrics are manufactured among themselves. They likewise are very extensively engaged in the raising of garden seeds, which are put up in a very neat manner, as is well known, and distributed over the country.

A three story brick building or college, erected for one of their families, is most remarkable for its neatness and the excellence of the materials and workmanship. What by the "world's people," is called taste, that is a study of symmetry and beauty in the forms of objects, is studiously abjured by this remarkable community. Yet in the perfection of finish, which they bestow upon every production of their mechanical industry, they show that native perception of fitness, order, and harmony, which constitute the elements of the most cultivated and refined taste. The same amount of expense and labor, of which they are never sparing, already devoted to the construction of their buildings and the arrangement of their grounds, had they indulged themselves even in a slight degree in tasteless ornament and embellishment, without impairing at all the convenience, utility or permanence of their works, might have rendered them extremely beautiful. In so doing they would have found in them a new and prolific source of pleasure, may I not add also of improvement. I know their candor will pardon these suggestions which have no unkind origin; and which have their foundation in the universal beauty of the natural world, as seen every where and always even in the perishable crystals of the frost, and the fading tints of the sky, in the plumage of the birds, in the unrivalled splendor of the vegetable world; in a word in every production of the divine power and goodness from an atom floating in the sunbeam to a planet, wheeling its course in the glittering arches of the skies.

From Colman's Second Report.

Compost and Liquid Manures.

Manures are the very sinews of agriculture; its food; its life-blood. To this matter the attention of most farmers cannot be too strongly directed.

It is generally conceded that all animal manures have most efficacy when applied in the greenest state. They are then most active; and their chemical effects upon the soil are immediate and powerful. In a direct application to the soil, however, they cannot be very thoroughly intermixed; and on this account, without question, they are less efficacious than they would be, if uniformly distributed and thoroughly incorporated with the earth. To effect this object in the best manner, it is desirable to form them in compost heaps, with other substances; mud, scrapings of yards, scrapings of roads, sods or decayed vegetable matters of every description; and even simple loam or mould, or any substance which will act as a retentive absorbent. Thus compounded the liquids of the manure will be retained and the escape of the valuable gaseous effluvia prevented; and by being thoroughly and equally intermixed and diffused, the whole mass becomes a valuable and efficacious manure. The amount of manure in this way is greatly increased; and it is believed, that one part of green animal manure combined in this way with two parts of mould, swamp mud, decomposed peat, and even some portion of clay, will prove quite as serviceable as if the whole mass were animal manure applied in a raw and unmixed state. Some intelligent farmers maintain that the proportion of animal manure or dung requisite to impregnate a large mass in compost is much less than I have allowed. This can be always favorably done in a well constructed barn-yard. The bottom of a barn-yard ought always to be kept well covered with loam or mud, or other matters to absorb the liquids of the yard. But it may often be done to ad-

vantage, where the manure on a field designed to be cultivated is seasonably carried out and mixed with mould obtained from the headlands to form the heap, which being turned over and worked up once or twice, will then be fit for use.

There is another matter, to which I invite the attention of farmers; that is, the saving of liquid manures. In the best districts on the continent of Europe, the liquid parts of manure are considered in every respect equal to the solid. There provision is made for saving and compounding them with the greatest care; in stone and water-proof vaults formed under their cow-houses. In our dairy districts especially, where large herds of cows are kept, a great amount of this manure might be secured by vaults, formed under the stalls with apouts leading into them. With a view to the same object likewise, the cattle instead of lying in the yards at night, should be always tied in stalls. If the barn is properly ventilated, and the stalls littered, they will lay as comfortably and securely as in the yards; and the saving of manure would much more than pay for any extra trouble, which it might be supposed to involve. These are homely subjects, but as important as they are homely. Doubling our manures is quadrupling our crops; and whoever will look with disdain upon a manure-heap, is indifferent to some of the most wonderful and beneficial operations of the divine Providence; and to the most remarkable and instructive lessons of religious philosophy.

THE URINE CISTERN.

From Rodcliff's Flanders.

The urine cistern is constructed to contain any given quantity. The usual capacity of the vault is for 1000 *tonneaux*, (barrels containing about 38 gallons, English,) which quantity for the rape crop, will manure little more than two *bonniers*, or seven English acres. But the cistern under the stables is nearly of double size; from this the exterior cistern is filled; and between both the farmer can fairly count upon manuring in the best manner, six *bonniers* or twenty-one English acres; or perhaps two *bonniers* in addition, of crops which do not require so much manure. The whole of this quantity (exclusive of farm-yard dung, ashes, composts, &c.,) is produced by eight horses and thirty six head of cattle, housed winter and summer in well constructed stables, increased by the adventitious aid of the rape-cake and the *ridanges* from the privies. In a cistern of 1000 *tonneaux*, it is not unusual to dissolve from 2000 to 4000 rape-cakes at 2 lbs. each. Indeed neither industry nor expense is spared for the collection of manure, so upon that depend the produce and fertility of a naturally bad soil. The farmer, who fails to make these exertions, is sure to be left in the back-ground.

The cistern is for the most part formed under the range of stables from each stall of which the urine is conducted to a common grating, through which it descends into the vault. From thence it is taken up by a pump. In the best regulated, there is a partition in the cistern, with a valve to admit the contents of the first space into the second, to be preserved there free from the later acquisition, age adding considerably to its efficacy.

This species of manure is relied on beyond any other, upon all the light soils throughout Flanders; and even upon the strong lands, originally so rich as to preclude the necessity of manure, is now coming into great esteem, being considered applicable to most crops, and to all the varieties of soil.

HARLEY'S EXPERIENCE.

Harley who kept a dairy of a hundred cows, near Glasgow, says "that the advantage of irrigating grass lands with cows' urine, almost exceeds belief. Last

season, some small fields were cut six times, averaging fifteen inches in length at each cutting; and the sward very thick."

EXPERIMENTS OF C. ALEXANDER.

The following extract transferred from the Farmer's Magazine to that spirited and valuable agricultural work, Young's Letters of Agricola, is so important and instructive that I subjoin it:

"This intelligent farmer, Charles Alexander, near Peebles, Scotland, had long been impressed with the great importance of the urine of cattle as a manure; and he set about to discover, by a long and well conducted series of experiments, the best method of collecting and applying it. He began by digging a pit contiguous to the feeding-stall, but distinct altogether from that which was appropriated for the reception of the dung. The dimensions of this pit, according to his own account, were 36 feet square, and 4 feet deep, surrounded on all sides by a wall; and the solid contents were 192 yards. Having selected the nearest spot where he could find loamy earth, and this he always took from the surface of some field under cultivation, he proceeded to fill it; and found that, with three men and two horses, he could easily accomplish 28 cubic yards per day: and the whole expense of transporting the earth did not exceed £41. 16s. When the work was complete, he levelled the surface of the heap, in a line with the mouth of the sewer, which conducted the urine from the interior of the building, on purpose that it might be distributed with regularity, and might saturate the whole from top to bottom. The quantity conveyed to it, he estimates at about 800 gallons; but as this calculation was founded partly on conjecture, for he measured not the liquor, it will be better and more instructive to furnish and proceed on DATA, that are certain and incontrovertible. The urine was supplied by 14 cattle, weighing about 34 stone each, and kept there for five months on fodder and turnips. The contents of the pit produced 288 loads, allowing 2 cubic yards to be taken out in 3 carts; and he spread 40 of these on each acre, so that this urine in five months, and from fourteen cattle, produced a compost sufficient for the fertilization of seven acres of land. He states further, that he had tried this experiment for ten years, and had indiscriminately used in the same field either the rotted cow dung, or the saturated earth; and in all the stages of the crop, he had never been able to discover any perceptible difference. But what is still more wonderful, he found that his compost lasted in its effects as many years as his best putrescent manure; and he therefore boldly avers, that a load of each is of equivalent value.

"Conclusions of vast importance are deducible from this statement: and I cannot resist the feelings of placing them in a strong and advantageous light. They speak a volume of instruction; and if we are willing to learn, they must lead to a very material alteration in the construction of our barns. It appears, then, that in five months, each cow discharges urine which, when absorbed by loam, furnishes manure of the richest quality, and most durable effects, for half an acre of ground. The dung-pit, which contained all the excrementitious matter of the 14 cattle, as well as the litter employed in bedding them, and which was kept separate for the purpose of the experiment, only furnished during the same period 240 loads, and these, at the same rate, could only manure 6 acres. The aggregate value of the urine therefore, when compared with that of the dung, was in the ratio of 7 to 6; so that we are borne out by these premises in this extraordinary inference, that the putrescible liquor which in this province, and under the management of our farmers, is wasted and annihilated as far as regards any useful purpose, is in-

trinsically worth more than the dung, as an efficacious and permanent dressing; and if we take into consideration, that this latter manure is not treated with any skill and judgment, it will not seem surprising, that the culture of white crops has never been carried here to any extent, since we have despised and neglected the only means of eradicating them."

Management of Bees.—No. 2.

MR. COLMAN—I resume the subject of bee management. Few insects or animals furnish more materials for instruction and reflection, than the honey bee. Therefore, why not use our best endeavors in preparing good places for their protection, that the millers and moths may not destroy their works. The blind Huber was the first to give mankind a history of that industrious creature, (the honey bee) which so much conduces to man's comfort and happiness.

In the management of the honey bee, very much is required of the apian to guard against the moths. In order, therefore, to do this, it is highly important that we obtain a good hive for the reception of the bees, and lend our leisure moments in taking care of them. The winter, being so long and cold in this latitude, seems to be a great detriment to the honey bee. In warmer countries it seems nothing to keep bees; it is evident, therefore, that they require warm places in the winter season to have them live and do well the following summer. Some apianists bury their bees in the winter, and some let them be exposed to the inclemency of the weather. Those that have practiced the former way, have very often been the losers. I do not think it is a good plan to bury bees, because there are other ways than to bury them in the ground better adapted to protect them through the winter. Those persons who keep bees, should build a good bee house, and have it open to the south that the sun may shine occasionally upon them. I know of no better way to protect the honey bee from the winter storms.

About twenty-five years ago bees were kept to good success—it was easy to raise them and have an abundance of the sweets of life. But of late years it is almost impossible to raise bees on account of the moths getting possession of the hive. There are but few farmers in this region of country that keep bees. They think the trouble and expense in taking care of them, is a great deal more than the profit. Some farmers have good and others have poor luck in keeping bees. I do not see any thing in the way to hinder the farmer from keeping bees, if he will only employ a few leisure moments in taking care of them. I would advise all who keep bees now at present, and intend to keep them for future years, to abandon the old fashioned hive and obtain the patent hive invented by Mr. Weeks. They are, in my opinion, superior to any other hive now in use in the United States.

I think, by using the above hive, bees can be kept as well now as formerly. Why these hives excel all others is, that we can obtain the sweets of life and not kill the bees. It seems a great cruelty to destroy such industrious insects, which conduce so much to human comfort and happiness. In my next I intend to give a more minute detail of the mode in which bees can be kept with success. W. S. T.

South Venice, N. Y. 1842.

Slaughtering and Packing.

The following terms we saw offered on an advertisement at a tavern in Monroe Co., and dated at Syracuse. We thought they might have some interest with the farmers:

Prices for killing, packing and inspecting, including barrels, \$1.25. The offal reserved to the packer. Tallow rendered from 7 to 8 cents. Hides from 4¢ to 5¢. Freight to New York, from 65 to 80 cents per barrel. For rendering and barreling tallow, \$1.25. Cattle will be kept free of expense, while killing off the drove. Syracuse, Aug. 15, 1842.

Mediterranean Wheat.

Every thing connected with the Wheat Culture is of immediate and the highest importance to the Farmers of Western New York. This induces us to give an insertion in full of the subjoined correspondence. The parcel of wheat has been duly received and will be placed in hands which will do it full justice. We acknowledge ourselves in this and in many instances, personally and publicly indebted to Mr. Ellsworth, for his distinguished and disinterested efforts for the advancement of the agricultural interests of the country.—Ed.

PATENT OFFICE.

July 20th, 1842.

Sir—I have the honor to transmit a parcel of Mediterranean Wheat, respecting which much has lately been published, and the peculiar qualities of which are described in the accompanying letters from Dr. Smith of Philadelphia, and Mr. Powell, seedsman, in the same city.

I am, most respectfully yours,

H. L. ELLSWORTH.

Philadelphia, July 14th, 1842.

Dear Sir—Yours of the 6th instant, came duly to hand, and I should have answered it sooner, had business and other circumstances permitted.

That variety of the Mediterranean Wheat which I have sown for several years past, I consider *proof* against the *Fly* and *almost* *proof* against the *Rust*.

For the former, no rational explanation has thus far been given: but the instances have been so numerous where this and the other kinds of Wheat among us have been sown on adjoining lands in the same field, with cultivation precisely the same—where this has remained untouched by the Fly, producing a heavy crop, and the others almost entirely destroyed, that the most sceptical have no longer any doubts upon the subject.

But, that it should so generally escape the mildew we have endeavored to explain from the fact, that it ripens from ten to twelve days earlier, than any wheat now sown in the Middle or Eastern States (as far as my knowledge extends). But that this is a full and satisfactory explanation I am not entirely prepared to believe; for the causes to which we have generally attributed the production of mildew may exist, when this Wheat is susceptible of being acted upon by them, as well as the other kinds.

These causes we understand to be:

1. That state of the *Plant* when the grain is fully formed but very soft and milky, the whole energies of the plant directed to its perfection, and the esp vessels not distended.

2. That state of the *Atmosphere* which tends still farther to distend the vessels; as heavy dews, and fogs and clouds, which obscure the Sun for several hours after his rising.

3. A sudden outbreaking of the Sun, with such power as to rupture the esp vessels of the plant, thereby giving a nidus for the Seeds of the Parasite to take root.

But be the causes what they may, it is rarely if injured by the *Fly* or *Rust*; nor are these all its advantages over any Wheat among us. For it may be sown from the first of September to the middle of October, and upon soil so thin that the farmer would not think of sowing any other kind of Wheat, and yet produce a fair crop.

I have sown it for two years, after a crop of corn and potatoes had been taken from the ground, and fully believe, that the yield after the potatoes, was upwards of thirty bushels to the acre.

If sown early, one and a half bushels per acre will be enough, but if not sown till in October, at least two bushels should be sown.

Now although the straw is so soft that it will most certainly fall in rich ground, still it ripens well, even should the timothy grow up through it and hide it from view. And although the grain is not so white and mellow, as some other varieties of Wheat, still, that it will produce more superfine flour to the acre for a given number of years than any other Wheat now extant, I feel no hesitation in asserting.

I shall be able to supply any moderate quantity in time for sowing, delivered at any place to be mentioned in Philadelphia.

With sentiments of a regard,

I remain your friend,

MOSES B. SMITH.

HON. H. L. ELLSWORTH,
Commissioner of Patents.

Philadelphia, July 14th, 1842.

H. L. ELLSWORTH, Esq.—

Dear Sir—So far as heard from, the Mediterranean Wheat grows more in favor as it becomes better known. Mr. White, formerly a merchant of our city, stated to me last fall, that he had sowed side by side with two or three others, and that this was the only one escaped Rust, Fly, &c. It is an early Wheat, adapts itself to the generality of soil, but especially to light sand—and as it becomes acclimated assumes more the cast of our Orange Wheat. I find a concurring opinion from many neighborhoods, that the Mediterranean Wheat this season, exceeds by great odds, all other varieties. I can supply a clean good article, as per sample, at \$1.75 per bushel.

Very respectfully,

M. S. POWELL,

23 Market-street.

Silk Machine.

Dr. A. K. Spaulding, of Maumee, Ohio, writes, that he has a Silk Machine far superior to any apparatus to be found elsewhere. That it—

1. Secures the most perfect ventilation to the worm in all its stages.

2. It enables the feeder to change them with great rapidity, even a hundred thousand per hour.

3. It furnishes the most complete winding chambers, exactly suited to the wishes of the worm.

4. The cocoons can be gathered from these chambers 500 per cent faster than from any other known, saving all the fluss perfectly clean.

5. It may be adapted to a room of any size, and may be used in any spare room or parlour without injury.

6. It can be made by any one who can use a hand-saw and hammer, and at an expense little more than that of plain shelves—being the most simple and most economical as well as the best method of fitting up a room, ever yet invented, either in Europe or America.

He adds—

“A letter enclosing one dollar current in New York and Boston, free of expense to the proprietor, shall be answered, and enclose a perfect drawing and description so perfectly plain that it may be understood by any one who can read the description—and twenty five dollars enclosed as above shall entitle the payer or payers to free rights, or the right to the country in which they live. Single rights ten dollars, and a perfect model sent to order.”

We confess we are anxious to know something more of this invention; and when we shall have become better acquainted with its merits, will inform our readers of the same.

Indian Corn.

When David Thomas travelled through Indiana in 1818, he visited a prairie near Vincennes on which a luxuriant crop of Indian corn had grown for more than sixty years in succession, without the aid of any kind of manure. He was then of opinion if I mistake not, that the soil contained a mineral substance which contributed to the inorganic structure of the plant; performing at the same time the office of collecting by chemical attraction the carbon and ammonia of the atmosphere, to nourish the organic development of the plant.

When travelling along the alluvial flats of the Cuyahoga in 1828, I noticed that each stalk in a hill of corn produced one large ear and sometimes two ears; I have every year since tried, by high manuring, to produce the same result in my garden, but without success until the present season. I could always produce stalks as thrifty and large as the river bottom, but the ears did not set or fill to the same extent. I attribute my success this year to the accidental combination of a just proportion of heat and moisture at the time when the pollen was distributed; this happy combination nightly takes place on the river bottoms, and perhaps, also, on the upland prairies near the Wabash at Vincennes, by the aid of the heavy night dews and river fogs almost unknown in this region, at least to the same extent of aqueous profusion, as it exhibits on the bottoms and prairies of the great South West.

But *apropos* of mineral or inorganic manures, it is now well known that wood ashes contains about eleven different incombustible substances in greater or less

quantities, all of which must be sufficiently component in the soil, before the perfect development of vegetable growth, and the full maximum of cereal maturity can be produced in the plant; vegetable manures undoubtedly supply all these substances, but they are not sufficiently concentrated or administered in sufficient quantities, to do any thing more than to produce during its decomposition (which in warm lands hardly reaches beyond two or three crops), the maximum yield.

May we not, therefore, infer that the cause of the perpetual fertility of Vincennes Prairie, is the great abundance of decomposed vegetable matter there found, not in the usual form or deposit of semi-vegetable decomposition to be diminished or exhausted by a few years cropping, but in something like the more condensed and indestructible form of wood ashes? I have often wished that we had in our country more analytical skill and enthusiasm in the cause of agricultural chemistry, in order that the theory of mineral manures might be better understood. The learned and indefatigable Sprengel, supported by the opinion of Liebig, has shown incontestably that plants have inorganic parts which must be fed and grown by the aid of inorganic or incombustible food, that they “must have mineral food as well as vegetable food.” These learned authors have faithfully exploded the old physiological doctrine about the essential nature of vegetable matter, their chemical analysis goes to prove that “all plants have two essential parts, an organic and an inorganic part.”

S. W.

Waterloo, Sept. 8th, 1842.

The Prospect of Prices.—The New Tariff.

Farmers should not be discouraged at the present low prices for their products. If our agricultural staples are low, all other commodities are low or will be low in proportion. Besides when prices are low the export of our surplus productions is then the most active. In 1834 the crops were good in England, yet owing to the extreme low prices of flour in the United States, more was exported from this country in that year, than in any one year since that time! It is probable that the wheat crop in Great Britain will be abundant this season. Still as soon as the price in New York falls much below \$5, an active export of that article will commence even to England, not perhaps to be consumed there, but to be sold in bond, out of which large quantities are taken for exportation to foreign British ports, and colonies in the Mediterranean, and in the East and West Indies.

Since the reduction of duties under the new British Tariff, our export trade to England has very much increased. Our packet ships to London and Liverpool now go out full freighted with our agricultural productions, including naval stores and pot ashes, the duties on which are reduced very materially under the new tariff.

Thus we see that the late fall in the price of our great western staple, Flour, so far from being a calamity to the farmer, has had the effect to clear the market by creating an export demand, which, while it gives activity to the market at home, also pays our foreign debt, or brings back an equivalent in specie, commodities, or credits.

In 1838 our Flour Factors in New York were aided by the Banks to monopolize the flour market and prevent an export at \$8 the barrel, which was offered for shipment to Great Britain; the result was that England got her supply from the continent, and the flour which might have been sold at \$8 the barrel, fell below \$6. In New York, Factors, Millers and Banks were ruined; many farmers were ruined, not directly by the high prices they received for their products, but indirectly by the means for speculation, and extravagant living which these high prices induced.

The protective tariff bill recently passed by Congress, is doubtless looked to by high tariff advocates, as the certain harbinger of a prosperous trade to the nation. I wish I could view all its prohibitory provisions with that eye of faith, which enables the friends of restrictive law to look beyond the simple laws of trade, for that mysterious accumulation of wealth, which is based upon buying and selling to each other, at prices sufficiently high to chest both parties into the belief that they are growing rich.

Waterloo, 1842.

S. W.

For the New Genesee Farmer.

MR. EDITOR—In your paper of the last month, I notice some remarks in relation to drinks and the proper time of drinking. The following article, from the writings of a celebrated Physiologist being in point, I have transcribed for your paper, if you think proper to publish it.

S.

Times of Drinking.

If man were as simple and as true to the laws and instincts of his nature as the lower animals, it would be of comparatively little importance at what time he drank, so that it was always in obedience to the truly instinctive demand of his vital economy. But in civil life, where many causes are co-operating to depress the physiological powers of the human body, and particularly to debilitate the digestive organs, it becomes of much importance that the times of drinking should be properly regulated. In regard to alimentation, we have seen that the best interests of the system require that the food should be perfectly masticated, and mixed with the salivary fluid before it is swallowed. We have seen also, that when the food is received into the gastric cavity in a proper condition, the stomach secretes a solvent fluid, which by the muscular action of the organ, is thoroughly mixed with the food for the purpose of digestion; and that when the food is received in a fluid state, containing considerable aqueous matter, the water is first absorbed and then the gastric secretion and digestion commences; because if the gastric juice were to mix with the water, it would be so much diluted that its solvent power would be wholly destroyed. Hence, if in the midst of a meal, or after a meal is completed, a portion of water or other drink is received into a vigorous stomach, and more particularly if true thirst is felt, the organ suddenly and powerfully contracts upon the food and preases it into the pyloric or small end, and by the contraction of a number of the circular fibres of the muscular coat, which gives the stomach somewhat of the appearance of an hour-glass, the food is held there till the fluid, which is received into the splenic or large end, is absorbed,—which is done as rapidly as possible, and then the circular fibres relax and the regular function of the stomach goes on, with little interruption or embarrassment. But if instead of properly chewing our food, and mixing it with the fluid of the mouth, we continually wash it down with some liquid, or between every two or three mouthfuls of food, take a small portion of drink, the fluid and solid ingesta are so thoroughly mixed together that the process of digestion cannot commence till the meal is completed and all the liquid removed by absorption; and this leaves the alimentary contents of the gastric cavity much more dry and compact than if no drink had been taken; and then we greatly retard and embarrass the function of the stomach, and serve to debilitate, relax and break down that organ. Yet while the stomach continues to be vigorous and active all this may be done without any appreciable symptoms of gastric embarrassment; but never without more or less real detriment to the organ and its function. In that state of gastric debility, however, which is almost universal in civil life, the case is very different; the fluid received into the stomach during the ingestion of food, is very slowly and with great difficulty absorbed; and if the food, with little mastication and insalivation, is continually washed down with some kind of drink, the process of digestion, instead of commencing immediately, as it ought to do, will be delayed for half an hour or an hour, and sometimes even longer, till the relaxed and debilitated absorbents can remove the fluid and bring the food into a consistency proper for the action of the gastric juice; and now the food, instead of being properly mixed with the saliva, and thoroughly saturated with healthy

gastric juice as it came into the stomach, mouthful by mouthful, lies in an oppressive and almost impenetrable mass, and the already weakened organ must, if possible, in its relaxation and lassitude, secrete a sufficient quantity of solvent fluid to digest it. But in this state the stomach is poorly fitted to secrete a healthy and energetic fluid; and, therefore, it is not surprising that under such embarrassments the vital powers of the debilitated and worried organ, are not able to control the inorganic affinities, but suffer them to become active in the formation of gases and acids, which by their acrid and irritating properties, create a morbid and intense thirst, which vehemently asks for some liquid to dilute those acid substances and almost irresistibly compels us to drink. If, however, in this state of things, we yield to the morbid demand, and take a quantity of water or any other liquid into the gastric cavity, the feeble organ cannot, like the vigorous stomach, contract upon its contents, and save them from the inundation; but the flood will come down and sweep over the entire mass, and reduce it to a more unmanageable wash than it was at first; and then will follow a distressing sense of distension, attended frequently with eructations and belching, and often a part of the crude contents of the stomach, are spasmodically thrown up, and a part perhaps ejected into the intestines to produce irritations, flatulency, colic, &c. This is a true description of what every day takes place in civil life, in hundreds of individuals; and if all who indulge in the mischievous practice of washing down their food with liquids of any kind, do not experience all these evil consequences, they may be assured the practice always tends to such results.

If the use of even pure cold water with our food in the manner I have described, is incompatible with the physiological interests of our bodies, and the cause of functional disturbance and organic debility, much more is that water objectionable when it is habitually used hot, for the same purpose and in the same manner. As with our food so with our drink, every thing taken into the mouth and stomach in a higher temperature than our blood, is relaxing and debilitating to the parts on which it acts, and through them to the whole system. The teeth and every other organ and part in the oral cavity, are injured by hot drinks; the throat and oesophagus and stomach are relaxed and debilitated by them. In short, as we have seen, every part of the system is in some measure relaxed and debilitated and rendered more liable to disease, by the dietetic use of any thing in an elevated temperature; and if, instead of hot water or milk and water, we use tea or coffee or chocolate or any other made beverage, the mischievous effects on our digestive organs are still greater, and always in proportion as the qualities of those beverages are more or less unfriendly to the vital powers of our bodies. Tea and coffee and wine and all other narcotic and alcoholic beverages are exceedingly deleterious, but as I shall have occasion to speak of them more particularly in another place, it is not necessary to say more concerning them now.

On the whole then, in regard to the drink of man, it were best, and most truly natural, if his dietetic and other habits were such that the demand of his vital economy for water, were fully answered by the aqueous juices of the fruits and vegetables which properly composed a portion of his food. But if he must have drink, every law and property of his nature unequivocally declares that it should be the most perfectly pure water; and that he should not drink it warmer than his blood; and as a general rule, it is better that it should be considerably cooler. It can be too cold, but with people in health and of good habits, there is very little danger in this direction. It is also,

fully evident that as a general rule, drink should not be taken with the food, nor too soon after eating. It is far better, if one is thirsty, to take a draught of pure cold water some twenty or thirty minutes before eating, or three or four hours after the meal; and they who are regular in their habits can regulate their thirst with perfect ease and comfort. An individual whose dietetic habits are tolerably correct, may soon accustom himself to take a glass of water in the evening or morning, or any other hour in the day he chooses, and only at that hour; and he will feel his thirst return regularly at that period, and never trouble him at any other time, unless occasioned by something extraordinary. They who are tormented by a morbid thirst produced by gastric irritation from too much or from improper food, had far better take active exercise in the open air, than drink. The cool fresh air upon their skin will greatly abate the fever of their stomach, and thus alleviate their thirst; and exercise will increase the action of the stomach and enable it to digest or to reject its contents; and then let them be more careful to avoid transgression.

Statistics of Vegetable and Animal Life.

Botanists record 56,000 species of various plants—35,000 are to be found in catalogues. Humbolt makes the species of insects 44,000, of fishes 2,500, of reptiles 700, of birds 4,000, and of mammiferous animals 5,000.

Important Notice.

There is a large amount due us from Post Masters and Agents in the Western States and elsewhere, mostly in small sums it is true, but our whole resources depend on such small sums, and therefore we hope no one will delay sending on that account.

¶ *One word to our friends.*—We have a large supply of back numbers of the current volume on hand, which ought to be in the hands of subscribers. Will you not help us—would you not be doing your neighbors as well as ourselves a real kindness, by soliciting them to subscribe? The currency is now considerably improved, and bills of most of the states will answer for remittances.

PUBLISHERS.

Cattle Shows, Fairs, and Ploughing Matches.

We subjoin a notice of the times of holding the several Agricultural Fairs, which come within our knowledge, within the district where our paper principally circulates, and shall keep it until the times arrive. We shall be obliged to the Secretaries of the different Agricultural Societies in New York, Ohio, New England and Canada, if they will give us (post paid) the notices of their respective fairs.

New York State Fair, Albany,	Sept. 28 and 29.
Monroe County " Rochester,	Oct. 25 and 26.
Ontario " " Canandaigua,	Oct. 18 and 19.
Genesee " " Batavia,	Oct. 20 and 21.
Wayne " " Palmyra,	Oct. 5 and 6.
Livingston " " Genesee,	Oct. 4 and 5.
Oneida " " Rome,	Oct. 11 and 12.
Seneca " " Waterloo,	Oct. 20 and 21.
Tompkins " " Ithaca,	Oct. 6 and 7.
Onondaga " " Syracuse,	Oct. 5 and 6.
Jefferson " " Watertown,	Sept. 15.
Cayuga " " Auburn,	Oct. 12 and 13.
Osawego " " Oswego,	Oct. 5.
Erie " " Buffalo,	Oct. 5th & 6th.
Chemung " " Fairport,	Oct. 19th.
Niagara " " Lockport,	Oct. 18 and 16.
Washington " " Salem,	Oct. 11th.

CANADA.

Durham, Bowmanville, Oct. 18.
Northumberland, Grafton, Oct. 12th.

Postponement.—On account of the session of the Circuit Court in Canandaigua at the time first appointed for the Show and Fair of the Ontario Agricultural Society, the Show and Fair are postponed by the Executive Committee to Tuesday and Wednesday, the 18th and 19th of October.

Advantages of Law.

A young man who studied law in Connecticut, became acquainted with the following facts, which are certainly very remarkable, though not so singular. A farmer cut down a tree which stood so near the boundary line of his farm, that it was doubtful whether it belonged to him or his neighbor. That neighbor claimed the tree, and presented the man who cut it for damages. The case was continued from court to court. Time was wasted, temper soured, and friendship lost; but the case was gained by the prosecutor. The last my friend knew of the transaction, the man who "got the case" came to the lawyer's office to execute a deed of his whole farm, which he had been obliged to sell to pay cost! Then, houseless and homeless, he could thrust his hand into his empty pocket, and triumphantly exclaim, "I've beat him!"—Selected.

FRUIT TREES,

Of Excellent and Proved Varieties

In addition to the list of Peaches given in the last number of the New Genesee Farmer, the subscribers have for sale the following select varieties of the Cherry: viz.—Black Tartarian, White Tartarian, Early Richmond, Black Crown, Mayduke, Transparent Gage, and Carnation. The trees are of large size, and of uncommonly handsome growth, price 50 cents each.

Nectarines, two excellent varieties, the Early Violet and Elrings, price 25 cents each.

Apricots, three very fine varieties, the Breda, Early Peach, and Peach apricot; 37½ cents each.

Pears, six excellent varieties, Madeline, Skinless, Julienne, Summer Bouchretien (or September), Seckel, and Virgalieu; 37½ cents each.

Apples, consisting chiefly of select summer and autumn table fruit, and a few winter apples, of the following varieties; Yellow Harvest, Woolman's Early, Sea Queen, Non-Buffington's Early, Strawberry, Rambo, Bullflower, Tallman Sweeting, Swann. Price 25 cents each.

The object of the proprietors has been to reduce their list to a few of the very finest kinds, and none are ever offered for sale by them but PROVED VARIETIES whose adaptation to our climate has been fully tested by experience.

Catalogues, with practical directions, furnished gratis at the Rochester Seed Store, or on postpaid applications.

J. J. THOMAS.

W. R. SMITH.

Macedon 10 mo. 1st, 1842.

M. B. BATEMAN respectfully informs his friends and customers, that he has disposed of his business, and all claims of debt are soon for the benefit of his health; he therefore earnestly solicits all who are indebted to him to make immediate payment, in order that he may be enabled to go to his home in the West. The business of the Rochester Seed Store will be continued by C. F. Crossman, whose experience in the business and facilities for growing Seed, entitles him to the confidence and patronage of the public.

M. B. BATEMAN.

Oct 1.

ROCHESTER SEED STORE AND SEED GARDEN.

NEW ARRANGEMENT—C. F. Crossman having purchased the entire business and effects of the Rochester Seed Store, desires to inform the Agents and Customers, and all who may wish to patronize the establishment, that he is now bringing in from his large Seed Garden in "Marquette," a complete assortment of such seeds as are best raised in this climate, and he will import from the first seedsmen in Europe and elsewhere, such kinds as are better raised in other climates. And such of continental vitality will be thoroughly tested by sowing, and none offered for sale but such as can be warranted genuine. The proprietor is fully confident that his long experience in the business of growing and vending seeds, will enable him, with strict attention to conduct the business in a manner that will prove satisfactory to the public.

Rochester, Oct. 1.

C. F. CROSSMAN.

SALE OF DURHAM SHORT HORNS IN CANADA.

THE Subscribers propose to sell by public sale, in Dundas (Plainboro') West, on Saturday, Oct. 13, being the day of the Gore District Agricultural Show, a valuable herd of thoroughbred DURHAM BULLS. The animals are half-bred, and of fine symmetry, and correct Herd Book Pedigrees will be furnished. Their ages vary from fourteen months to four years and. Hereafter, be reminded that this is our opportunity of obtaining Genuine stock.

To us fair and liberal, Easy water conveyance from Dundas is. Sale to commence at 12 o'clock noon.

Orders to Mr. H. WITTE.

ADAM FERGUSON.

Same day and place Mr. H. WITTE will expose a large and valuable lot of RAM LAMBS, pure Leicesters, South Down and Cross. Also, six valuable calves, one year old.

MOUNT HOPE GARDEN & NURSERIES.

ROCHESTER, NEW-YORK.

THE Proprietors of this Establishment offer for sale a general assortment of Nursery articles, comprising Fruit and Ornamental Trees, Flowering Shrubs, Herbaceous Plants, Tulips, Hyacinths, and other Bulbous Flower Roots, Double Dahlias, &c. &c.

They have also on hand a large and fine collection of Green and Hot House Plants, including Geraniums, Chinese Monthly Roses, Camellias, Japonicas, Chinese Azaleas, &c. &c. &c.

Orders for any of the above articles, whether large or small, will be promptly and faithfully executed, and charges in all cases will be very moderate. Persons ordering from this establishment may rely on their articles being carefully packed and marked and shipped as their orders may designate.

To such persons as are about forming new establishments or who may wish to dispose of Trees, Shrubs, Plants, &c. in their neighborhood, our terms will be very liberal.

Gardens and Pleasure grounds will be laid out in any part of the country, and skillful gardeners furnished on reasonable notice, and information, and all subjects connected with the business will be cheerful and promptly imparted.

It is expected that persons unacquainted with the proprietors will either accompany their orders with a remittance or name a guarantee in the city of Rochester or vicinity.

ELLISWAGER & BARRY.

Rochester, Oct. 1, 1842.

Our Fruit Trees comprise the most desirable early and late varieties, and the utmost care has been taken in propagating from such trees only as were in a bearing state and whose qualities have been sufficiently tested. Price Catalogues will be forwarded gratis to all applicants.

COTSWOLD SHEEP.

AND OTHER FINE STOCK, FOR SALE.

THE Subscribers offer for sale, his full blooded Cotswold Bred, Blackmore, imported or bred by Thomas Dunn of A. Bayly. Also, thirty 3-4 and 7-8 Cotswold Bucks, Yearlings and Lambs. Also, his thoroughbred Durham Bull Animal, bred by or for his friend, Durham Heifers. Also, a thoroughbred Leicester Bore.

These animals will be sold on the most favorable terms—at prices according to the times. It is not previously disposed of, but he is charged with the duty of being sold at the Show and Fair at Rochester on Tuesday, the 23rd of October.

W. M. C. COINELL.

Henrietta, Sept. 21, 1842.

10,000 PEACH TREES.

FOR sale by the subscribers at their Nursery, (near Macedonville on the Erie Canal), all of which have been propagated from BEAUFORT TREES, whose genuineness or excellence has been thoroughly proved. They are of fine and very thrifty growth, and have all been at least once transplanted, and the danger of loss or even check in growth from this operation, is exceedingly lessened. Price 25 cents each, 2500 hundred, \$1500 per thousand or \$1500, well packed and delivered.

The following are the chief varieties, which will afford a constant succession of ripe fruit from early in May (Aug.) till late frosts, ripening according to the order in the list.

1. Early Yellow—fruit medium size, excellent, a good bearer, and a most valuable early peach.

2. Large Yellow—fruit large, excellent. Ripens ten days later than the preceding.

3. Early York—large sweet and rich; a fruit of the highest character.

4. Early Red—large, white with a red cheek, sweet, juicy and melting, a most excellent peach, abundant probably from the celebrated Noblesse, which it exceeds.

5. Yellow Almond—fruit rather large, one of the finest yellow peaches, and one of the earliest.

6. Seedling's—fruit large, red, of first rate excellence.

7. Red Cheek Malacodon—fruit rather large, beautiful of fine flavor; ranks as first rate among yellow peaches—leaves well white young.

8. Hull's—fruit a very large, fine, yellow peach.

9. Late York—an excellent freestone peach, except in unfavorable seasons.

10. Heath Yellow—fruit when not grown early, and in favorable seasons very large, often three inches in diameter, sweet and excellent.

Orders directed to Thomas & Smith, Macedon, Wayne Co., N. Y., will be promptly and faithfully attended to, and the trees, suitably packed, sent by the Erie Canal, or by the Auburn and Rochester Rail Road.

J. J. THOMAS.

Macedon 9th mo. 1, 1842.

W. R. SMITH.

PLOUGHS.

A NEW AND SUPERIOR KIND OF PLOUGHS, (two sizes) designed for breaking up square and oblong fields, may be purchased at the Rochester Eagle Furnace, price \$60 and \$75 each. Wood and other produce taken in exchange.

A. J. LANGWORTHY.

BUFFALO NURSERY.

THE stock now on hand for sale is much larger than at any former period, embracing a large collection of the most valuable kinds of Apple Trees, viz.—Piedmont, Quince, Nectarine Apple, Filbert, Strawberry, Raspberries, Gooseberries, Currants, &c.

Of Ornamental Trees, Flowering Shrubs and Plants, a fine assortment, comprising almost every desirable article in this department. A large stock of Green-house Plants.

I also offer for sale 25,000 Apple Trees of one year's growth, of the most desirable varieties, in quantities not elsewhere over one foot high. They consist of 130 of the most valuable kinds—four-fifths of which have been from bearing trees and consequently will soon produce fruit. They will be sold at such a low price as \$2. per hundred—No less than from 5 to 10 of any one kind to be taken.

Also, 5,000 seedling trees of the true English Mazzard Cherry, at \$6 per 100.

Orders by mail or otherwise, will receive prompt attention. Trees or Plants packed in superior order and shipped at Buffalo on board of any steamboat, vessel, or canal boat required. Catalogues gratis to every applicant.

Buffalo, Aug. 2, 1842.

B. HODGE.



ISABELLA GRAPE VINES.

OF proper age for forming vines, propagated from and containing all the good qualities which the most improved cultivation for over ten years has conferred on the vineyards at Croton Point, are now offered to the public. Those who may purchase will receive such instructions as will enable them to cultivate the Grape with entire success, (provided their locality is not too far North.) All communications, post paid, addressed to T. UNDERHILL, No. 2, Broadway, N. Y., will receive attention. He feels quite confident that he has so far ameliorated the character and habits of the grape vines in his vineyards and nurseries, by improved cultivation, pruning, &c., that they will generally ripen well and produce good fruit when planted in most of the Northern, all the Western, Middle and Southern States.

Oct. 1.

ROCHESTER PRICES CURRENT.

Corrected for the New Genesee Farmer, October 4.

WHEAT,.....	per bushel,.....	\$ 75 a \$ 78
CORN,.....	".....	38..... 44
OATS,.....	".....	19.....
BARLEY,.....	".....	38.....
RYE,.....	".....	44..... 50
BEANS, White,.....	".....	75..... 88
POTATOES,.....	".....	15..... 18
APPLES, Desert,.....	".....	19..... 25
FLOUR, Superfine, per bbl.....	3.75.....	4.00
" Fine,.....	3.00.....	
SALT,.....	".....	1.00.....
PORK, Mess,.....	8.00.....	8.50
" per 100 lbs.....	2.50.....	3.00
BEEF,.....	per 100 lbs.....	2.50..... 3.00
POULTRY,.....	per lb.....	5..... 6
EGGS,.....	per dozen,.....	8..... 10
BUTTER, Fresh, per pound.....	10.....	12½
" Firkin,.....	8.....	9
CHEESE,.....	".....	7.....
LARD,.....	".....	8.....
TALLOW, Clear,.....	".....	8.....
HIDES, Green.....	".....	4..... 43
PEARL ASHES,.....	per 100 lbs.....	5.00.....
WOOL,.....	".....	4.75.....
POT,.....	per pound,.....	20..... 25
HAY,.....	per ton,.....	6.00..... 8.00
GRASS SEED,.....	per bushel,.....	1.00..... 1.25
CLOVER SEED,.....	".....	5.50..... 6.00

NEW YORK MARKET, Sept. 30.

Flour drops still; there is a good demand, but a still better supply. Genesee has sold to the extent of several thousand barrels, at \$4.50; some Ohio at \$4.50, but other parcels at \$4.44, and one at \$4.37½; 300 bbls. Troy sold at \$4.37½. 1500 bu. good Indiana Wheat brought in small parcels 94 a 95c; flat Corn is worth 56c wt; Northern Red delivered, 59c, sales; Oats are cheaper, say 28 a 29c for canal, and one or two sales at 27c.

Sales of Ashes are \$5.50 for Pots, and \$5.75 for Potile.

Chicago, Sept. 27th.—Large sales of Wheat were made at 53 to 54 cts. cash. Flour, 3.25 to 3.50. Corn, 23 cts. Oats, 15 cts.

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M. B. BATEHAM, Proprietor. { VOL. 3. ROCHESTER, NOVEMBER, 1842. NO. 11. } HENRY COLMAN, Editor.

PUBLISHED MONTHLY.
TERMS.
 FIFTY CENTS, per year, payable always in advance.
 Post Masters, Agents, and others, sending current money free of postage, will receive seven copies for \$3.—Twelve copies for \$5.—Twenty-five copies for \$10.
 The postage of this paper is only one cent to any place within this state, and one and a half cents to any part of the United States.
 Address M. B. BATEHAM or H. COLMAN, Rochester

PROSPECTUS.
 The subscriber announced himself in the last number of the New Genesee Farmer as the sole proprietor and editor of this paper, after the first of January ensuing. He renews this announcement; and asks the aid of his friends and the agricultural community in sustaining the paper as far as they can conscientiously render that aid; and he will respectfully and gratefully acknowledge every such service.

The paper will be so much enlarged; and if suitable encouragement is given, in all respects essentially improved. He has made arrangements to enlarge his correspondence extensively at home and abroad; and pledges himself that no pains shall be spared to render the paper worthy of support in its matter and execution. He can promise no more than this.

The price of the paper will be one dollar in advance by the year. Six copies will be sent for every five dollars; ten copies for eight dollars, and fifty copies for thirty-seven and a half dollars, paid in good current money. Gentlemen who have heretofore acted as agents are requested to continue their agency. Postmasters are universally found courteous enough to transmit names and subscription money free of expense. Other arrangements as soon as completed and the names of special agents will be enounced in the December number. It is earnestly requested that returns should be made early, that the number of copies to be printed may be ascertained.... The universal complaint is that the times are hard; but the productions of the press, even in times infinitely harder than the present, were never half so cheap as now. The farmer now gets his political paper and two or three agricultural papers for less than what one respectable political paper or general magazine used to cost. The times must indeed be hard, when the farmer cannot afford the miserable pittance, which he may save in innumerable ways, required to obtain that information, which may increase his products a hundred fold; to say nothing of the satisfaction and improvement to himself and family from knowing what others are about, and witnessing the general progress of knowledge and the arts. What the temperate farmer now saves year after year in the expense of spirituous liquor only for his haying, to say nothing of other expenses and losses connected with its use, to which he was formerly subjected, will pay five times over for his agricultural paper, and leave enough to buy eight or ten useful volumes besides for the winter reading of his wife and daughters. When we go into our farmers' houses and see their loaded tables and their comfortable and luxurious clothing and fur-

niture, and hear them talk of hard times, we are constrained to ask ourselves, whether this is the English language which is spoken, for under what sky, in what country, and at what period, were men ever in a condition of more substantial comfort and independence. If they are but just to themselves and to their advantages, no change of times or of prices can seriously effect their prosperity.

In truth we see but one single circumstance, that should hinder every farmer in the country from subscribing at once for the Genesee Farmer; and that is Millers' doctrine that the world is to come to an end next summer. But even Millers' disciples are very anxious to get subscribers at a dollar per head for the "Second Advent Journal" which is now published periodically in Boston, tho' we are quite at a loss to know what they are to do with the money, unless as the Romans believed, there is some ferrige to pay for themselves and other friends before they can get into the Elysian fields. But besides we have been informed by one of their Chief Priests that it is not settled that the prediction is certainly to be fulfilled in April, but probably some time in the course of the next year; so that the farmers will stand a fair chance of getting for their dollar six or eight months good agricultural reading at any rate, besides the satisfaction and merit of contributing to the good cause of agriculture and of helping a poor Editor, who has borne the heat and toil of more than forty years in their service.

Farmers! then we expect you to honor the noblest of all arts, by which you live; and to give us a fair and public-spirited support; and we promise to do our best to deserve it. "Do not muzzle the ox that treadeth out the corn." Do not be too impatient to get a crown in one hand before you let a dollar go out of the other. The welfare, character, and happiness of millions yet unborn may depend on the efforts we now make; and your co-operation that those efforts may be successful. Let us early and late sow the precious seeds of knowledge, wisdom, and virtue and "the Lord of the Harvest will give the increase."

HENRY COLMAN.

Rochester, 1st Nov., 1842.
 N. B. Mr. M. B. Bateham proposes to pass the winter in Ohio and the South Western States, and will act as Agent for this paper—we anticipate likewise the advantage and pleasure of his regular correspondence for the paper.

Mr. C. F. Croaman, of Rochester, is an authorized Agent for this paper. Mr. C. having taken the Seed Store in the Arcade, recently occupied by Mr. Bateham, designs to render the Establishment complete in all its departments. His skill in raising and managing seeds is well known, and his honor and integrity undoubted.

NOTICE.

The Address delivered before the Monroe County Agricultural Society, by H. Colman, together with the Constitution and list of officers and members of the Society, and the reports of the awarding committees, will be published in pamphlet form, for distribution, as soon as they can be prepared.

By order of the Executive Committee.
 M. B. B.

METEOROLOGICAL OBSERVATIONS,
 MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY
 L. WETHERELL, OCTOBER, 1842.

Date.	Thermometer.		Winds.		Weather.		Rain Gauge	
	Surface.	10 o'clock P.M.	A. M.	P. M.	A. M.	P. M.		
26	40	62	50	51.0	s w	s w	fair	
27	45	71	63	62	s w	s w	fair	
28	59	69	57	60.16	s w	s w	fair	
29	50	71	67	63	s w	s e	fair	.04
30	52	65	57	58	s w	s w	fair	
1	52	72	56	60	s w	s w	fair	
2	52	57	50	52.33	w	w	rain	.03
3	48	55	50	49.5	s w	s w	rain	.04
4	39	53	49	46.5	s w	s w	fair	
5	38	53	43	43.66	s w	s w	fair	
6	39	58	49	48.16	s w	s w	fair	
7	43	71	57	57	s	s w	fair	
8	55	64	57	57.83	s w	s w	rain	
9	50	49	46	46.5	s e	s w	rain	.87
10	39	55	46	48.16	w	s w	fair	
11	48	68	57	57.66	s w	s w	fair	
12	48	56	50	49.33	s w	s w	fair	
13	36	67	43	49.33	s w	s	fair	
14	43	68	46	52.66	s w	s w	rain	
15	45	54	41	45.83	w	w	cl'dy	.59
16	40	52	56	49.66	s w	s w	cl'dy	
17	42	54	44	46.83	s w	s w	cl'dy	.08
18	43	46	40	42.33	s w	s w	rain	.31
19	39	46	41	41.66	s w	s w	rain	
20	37	45	38	39.66	s w	s w	nd elect	.04
21	35	53	44	45.83	s w	s w	fair	
22	46	51	48	47.33	s w	s w	rain	
23	40	50	40	44	s w	s w	fair	.12
24	44	67	57	56.83	s	s	fair	
25	47	52	46	46.16	s w	w	rain	

Rain Gauge for Sept., 1842, 5.19 inch.
 " " " " 1841, 6.14 "
 " " " " 1840, 2.81 "
 Mean Temperature of " 1842, 58.04 deg.
 " " " " 1841, 26.96 "
 " " " " 1840, 57.44 "

Remarks on the Weather from September 26th to October 25th.

Sept. 28th, rained a little at night; fair to the end of the month.

October, from Oct. eighth; the eighth month of the primitive Roman year. The tenth month of the year in our calendar.

This month has been mild and pleasant. Mean temperature first half 51.13 degrees. Severe frost on the morning of the 6th.

Oct. 15th, cloudy with little rain; not much wind; but there was a severe gale on Lake Ontario, thro' the day and evening. It has been remarked by those who know, that the Lakes have been "uncommonly rough" this season.

It is remarked by observers, that there are many strong indications of a severe winter.

There arrived at Buffalo on the 10th ult., seven steamers, 5 brigs, 15 schooners, and 1 sloop. These brought a large quantity of produce, among which are 12,471 barrels of flour, and 51,866 bushels of wheat.

SCIENTIFIC AGRICULTURE.

Extracts from an Address

Before the Massachusetts Horticultural Society, at
their Fourteenth Anniversary, by
J. E. TISCHMAYER.

This Address is in all respect so beautiful and admirable, that we know we shall do a kindness to lay it before our readers:

I congratulate you that we again meet to give countenance and support to a pursuit which, at the present day, interests and is the delight of the whole civilized world. Yes, wherever a ray of civilization sheds its lustre on this earth, one of the objects of that ray is Horticulture; it forms the charm of the leisure hour of the highest, the wisest, the best; it is the healthy occupation of the humble, and the industrious.

Absorbed in the cultivation of his favorite flowers, his patch of vegetables, or his orchard of fruits, the poor man carries not the wealth, nor is his sane and well-braced mind disturbed by the disease and empty dreams of the ambitious.

So thoroughly convinced am I that indulgence in these pursuits carries in its train content and cheerfulness, these serene signs of health, both of body and mind, and induces that position of the heart which enables one to view, without envy, without desire, the place of the prince or the luxuries of the nobility, wherever it shall please a kind Providence to allot me a station, there will I to my latest day advocate the cause, encourage the dissemination, and strive for the improvement of Horticulture, with all the powers entrusted to my charge.

How happy for millions had Horticulture, with its refinements, been in earlier times more universally disseminated amongst mankind! What would have been the pages of the history of South America from its discovery to this day, had Pizarro, and the ministers of religion who accompanied him, associated the cross which they bore in one hand, with the spear, the rake, and the pruning knife, instead of the lance, the sword, and the gun, in the other? How different would have been the existence and fate of the whole generations of natives, who passed lives of misery, and were finally exterminated—how different would be, at this day, the face of the immeasurable plains, the far stretched forests, in such a heavenly climate! Her history would have been one of peace and prosperity, instead of one of blood and desolation; her plains would have been covered and adorned with swarms of happy and industrious races, by whom the names and the memory of these discoverers and civilizers would have been venerated & held sacred, like that of Mango Capac, who in ancient times introduced the simplest arts of peace among them, instead of being held in that extermination which has at length resulted in their total expulsion from thence from the country.

Horticulture may be emphatically named as one of the arts which exhibit most prominently the peace and prosperity of a nation, and should certainly be upheld by all to whom these happy results of human reason and divine religion are dear.

I have read in an English agricultural periodical, otherwise of some eminence, several arguments urged rather vehemently against Horticulture and Floriculture. The arguments are chiefly based on the ill-will, the evil disposition, or trickery, which sometimes exists amongst the competitors or judges. As if this evil could be entirely avoided in emulation or competition for any thing on earth, whether for a diadem or for a throne; as if the ill-will engendered by these exhibitions among the few, could be at all placed in comparison with the pleasure they impart to the many, or with the encouragement they afford to a healthy and delightful occupation. The solidity of such objections stands about in the same rank as those to reading and writing, on account of the forgeries now and then committed.

There is, however, much higher ground at the present day, for congratulation to the lovers of the cause whose advance we here signalize.

It is the rank to which Horticulture has recently attained as a science. It is no longer a mere curiosity of gardeners' secrets for propagating or growing certain plants, of nostrums and recipes for destroying insects and cleansing trees; it has become the constantly improving art of applying scientific, rational and well-digested principles, to perfect the cultivation of the vegetable kingdom; it has suddenly almost become a subject of delightful and interesting investigation for scientific men of the most refined attainments.

I am far, however, from despising these secrets, these nostrums; they have frequently resulted from

the close observation of men of most excellent judgment, men who will be the first to accept the aid of science to strengthen their reasoning powers and guide their judgment. I only rejoice that neither the facts themselves, nor the principles on which they are founded, will any longer remain secret; they will henceforward be made known and communicated to all those accustomed to study and to trace exactly the minute operations of nature, to reason and reflect on each new appearance, and to exert all their acuteness in tracing its cause to the utmost verge of human knowledge. And these clear and simple principles, on which all improvements are grounded, must henceforward be described in such plain and intelligible language as will guide those who, without these habits of study and observation, pursue the cultivation of the soil either as an occupation or a pleasure. Horticulture is now capable of becoming to the agriculturist what the chemical laboratory is to the dyer and the manufacturer. It is in the garden and the greenhouse that useful experiments may be made on the value of different manures when mixed with different soils, their effects accurately tested on various kinds of plants, the mode of application carefully and accurately observed, and the economy of that application practically ascertained. And these experiments are more necessary at the present day, when we are inundated with artificial and natural manures and composts of all descriptions, whose virtues and efficacy are boasted of and lauded for the purpose of sale, with more than a pedlar's energy.

Owing to the kindness of Mr. Benjamin Bangs, of this city, who presented to me a small portion of Guano, brought by one of his vessels, the Henry Lee, from the coast of Peru, it has fallen to my lot to try the effects of this much celebrated manure on several plants. The chemical constitution of this substance renders it probable that it is the excrement of birds, which has, during countless ages, accumulated on the Peruvian coast, where it forms beds of considerable thickness, and where it has for several centuries been used by the inhabitants of that sterile coast to raise luxuriant crops of corn. There are this year sixty English vessels employed in fetching this manure to the English markets.

The most recent, and probably most correct analysis of Guano, that by Voeckler, shows that it contains many of the ingredients favorable to vegetation, such as several salts of ammoniac, phosphates of lime or the chief component part of bones in abundance, potash, soda, and as much as one-third of organic matter, which would furnish humus with a little clay and sand.

Immediately on receiving this Guano, about the 17th June of this year, I commenced my experiments, which I will now explain in order, and as briefly as possible.

First observing that all those plants which were treated with Guano were potted in a mixture, consisting of plain earth without any manure, sand, and little leaf mould and peat, with which the Guano was mixed—that those plants which compare with them have been grown in our richest compost—and that both have had the same attention, and been grown otherwise under the same circumstances,

Fuchsia—*fulgens*—one year seedling, potted 17th June, 24 inches high with one teaspoonful not potted up, of Guano—repeated 17th August, then 12 inches high, with another spoonful of Guano—a now 44 inches high.

Plant contrast between this and the two years old plant is very striking, both as to luxuriance of growth and color of the foliage, the plant with Guano being vastly superior. I think also that the color of the flower is improved; it is well known among gardeners that it is rather difficult to grow this plant well.

Parlagonum—two seedlings grown with Guano and one of the same sowing without; on the 17th June these two were potted with one teaspoonful of Guano, and repeated on the 17th August with another teaspoonful; here also the difference in favor of Guano is very great.

China Rose—two cuttings with Guano, potted 17th June, with one teaspoonful Guano—one was then 7 inches high, the other 43; they are now 34 in. & 38 in. respectively, with large healthy foliage and stems; these have not received a second application of Guano.

Celastrus cristata or Cockcomb—one seedling, with one teaspoonful and one of the same sowing without—the size of the stem, foliage, and head of that with Guano is more than double that of the other, and the difference in the green color of the leaves remarkable.

Sylvia patens with one teaspoonful of Guano—the

effect here has been to lengthen the joints, and the flower appears a trifle smaller than usual.

Aceria Farnesiana—a seedling showing the effect of the foliage and length of the joints previous to the application of a teaspoonful of Guano, and the remarkable growth of both afterwards.

Camelia with two teaspoonful 17th June, and no more. This specimen, which was quite small and unhealthy before the addition of Guano, is now as healthy by the lower leaves, exhibits in a most marked manner, by its beautiful large deep green leaves a healthy bud, the action of this manure.

I have also exhibited a Camelia grown with large proportion of wood which, the foliage at least is extremely fine and luxuriant, and of a very healthy green color, but as may be seen, not at all equal to that worked with Guano.

One Balsam, 17th June, 24 spoonful, repeated 9 August with two more to which a little lime was added.

This is an ugly specimen, being nearly past flowering; but I sent it to confirm an observation in the London Gardener's Chronicle, which states that if Balsams worked there with Guano, come with smaller flowers—it is evidently the case here, but I have watched it carefully and found that not a single flower bud forming its seed vessel, and that every seed vessel I have opened, is quite full of perfect seeds containing from 11 to 20 in. I wish this point to be carefully remembered, as I shall sound some farther remarks upon it.

From what I have seen of Guano it is quite clear that its action is rapid and powerful on the stem and foliage, increasing their size and deepening their green color; of this fact there can be no doubt. I think it probable that it diminishes the size of the flower in some cases, and that it improves the seed, both in quantity and quality—of this, however, much more experiment is required to prove the certainty. I have one more remark to make, when these plants were repeated, which received a second application, it roots were very numerous, and appeared in the most vigorous healthy—thick, succulent, pure white, tips with that hairy appearance so well known by cultivators as a sign of strong growth.

In Peru it is customary, when using Guano to raise pepper, to manure three times, first on appearance of the roots, then on the appearance of the leaves and lastly on the formation of the fruit.

I think the experiment of its action on all fruits particularly the larger fruit trees, as apples, pear, peaches, &c., will be extremely interesting, as we as on the vine, which is well known to be excessively greedy for rich soil, particularly for bone manure, the chief ingredient of which, phosphate of lime, Guano contains in considerable quantity.

But if Horticulture be indebted to science for man improvements, it is amply able to repay the debt with interest. The Garden, with its convenient Greenhouse, is the true study-chamber of the Botanist—here he will find arranged, as on shelves, in perfect order for reference and examination, nature's works in thousands of volumes, written in living characters. Here he can consult with, or investigate from, the living plant, the characters and descriptions of the old Botanist, often only imperfectly obtained by their from the dried specimen of the Herbarium; nay here imagination may sometimes even transport him to the once visited Alpine rock, or Tropic forest, and for the purpose of studying properly the plant or his own country, a living collection is highly important. It is impossible for him to exhaust his time in watching the growth, inflorescence or habits of each in its native spot, but collected in the garden or greenhouse, with proper attention to their natural soil and circumstances, this often becomes both practicable and delightful.

For if the Horticulture of the olden time be no that of the present, neither is the Botany of the past that of the present one. The time has gone by when a Botanist could boast, without a blush, that he had never cultivated a plant; he must now know no merely the name, but the nature, of the individual of the vegetable kingdom; he must study their structure during the advance from germination to maturity must become acquainted with the functions of their various parts, must watch their growth and transformations, and examine with his own eye many operations of the living plant, on which it is impossible to gather knowledge from the Herbarium; in fine, the study of vegetable physiology in the living individual, is now indispensable to the Botanist.

It is the want of good collections of living plants that we find here the great barrier to our advance in this science; in Europe, Botanic gardens abound everywhere, into which all newly discovered plant

quickly introduced; and thus the multiplication of the essential means of study is rapid—here we must depend chiefly on books, and I need hardly state how much more valuable and interesting is the book of nature than the book of man. A remnant of the ignorance of the older botanists, I think is found in the opinion of many of them still entertained towards the transformations in flowers, effected by the art of the horticulturalist, either by hybridisation or by the multiplication of parts, causing what is called double flowers. To me this aversion appears to arise from a contracted view of the subject—all these transformations or operations of nature, which all take place in accordance with her laws, and therefore all are deserving of study and of systematic arrangement, and when well understood they must throw much light on the functions of different parts, as well as on the relations these parts bear to each other. Every deviation from regular structure, called by the man of science abnormal, must afford insight into the laws of that structure, and I am convinced that the more these changes are studied by the scientific Botanist, the more enlightened will become the views on those portions of the vegetable kingdom which are now comparatively obscure.

I cannot resist the temptation to explain a single instance where the close observation of the growth of plants is of importance, and I do so most willingly, as the result is likely to be useful, and bears directly on the interesting subject of Guano.

The nectariferous juices, or, as it is commonly called, the honey in flowers, is usually separated or secreted by glandular bodies called nectaries, and this honey has by many been supposed to be of indispensable service in the fecundation of the seed; but there are also glands on the leaves and leaf stalks (petioles) of many plants, which perform the same office of secreting honey; here, of course, it cannot be of use or of this purpose. Such glands exist on the petioles, or leaf stalks, of most of the *Acacia* tribe, on the tips of three or four of the lower serratures on the leaves of *Grewia*, on various parts of the leaves or stems of the *Balsam*, on *Pasiflora*, and many other plants.—The glands only secrete honey during the youth and growth of the leaf; it is then only that their operation and beautiful structure can be properly observed; when the leaf has attained its full growth and perfection, the nectariferous parts close up, and the time for observing their powers is past, and the leaf then proceeds in its own important function of elaborating the sap. It has been lately surmised, and it appears to me with every probability of truth, that this honey is an excretion thrown off, of the superabundant and useless part of the juices, after the leaf or flower has selected all that is necessary, precisely analogous to the excretions of the animal frame. I will attempt, very briefly, to show that this view, if correct, is of some importance both to Agriculture and Horticulture. Mr. A. A. Hayes, of Roxbury, in a beautiful, simple, and I believe original experiment, exhibited before the Chemical Society of Boston this spring, proving the existence of phosphoric acid (probably combined) in several seeds, by immersing sections of them in weak solutions of sulphate or acetate of copper; in whatever of the seed phosphoric acid existed, on that part was deposited a precipitate of phosphate of copper; this was particularly evident in the seeds of Indian corn.

A certain quantity of phosphoric acid, or phosphorus, is therefore necessary to the existence of these seeds, and that part of the plant, (probably the flower), destined to perform the function of preparing the juices for these seeds, must go on exerting its utmost powers in selecting and rejecting until the requisite quantity of phosphates and other ingredients for the seed are obtained. Now the phosphates in most soils exist in extremely minute quantities; therefore, those plants and flowers whose seeds require any quantity, must extract large portions of food from the soil before they can select the amount of phosphates necessary for the perfection of their seeds; and probably only as many seeds arrive at maturity, as the plant can procure phosphates to complete; the remainder, embryos of which are always formed in abundance, are abortive; that is, never come to perfection.

The same line of reasoning of course applies to the other necessary ingredients of seeds. If, therefore, we present to a plant food containing an abundant supply of these ingredients, it seems reasonable to suppose that we shall produce more seeds, or rather that more of the embryo seeds will be perfected. Now I have before stated that the chemical analysis of Guano shows that it contains, in abundance, most of the necessary ingredients of plants and seeds, the nitro-

gen of its ammonia being absolutely requisite for the cellular, vascular and other parts of the stem and leaves, and its phosphoric acid, as well as its nitrogen, for the seeds; and of future experience should confirm what I have to-day stated as an opinion, that the flowers of plants manured with Guano become smaller, it may be accounted for on the assumption that as there is presented to the plant these ingredients in abundance, particularly those necessary for the seed, the flower and its glands, whose office it is to prepare the latter, have less work to perform, less food to analyze, less to select and less to reject; hence there is no necessity to have them of so large a size as where much exertion of these functions is required. The seed will also be larger and in greater quantity.

I offer this train of reasoning on an abstract and little understood subject with the utmost diffidence, and certainly under the impression that we have not yet sufficient evidence or experience on this most interesting manner to offer a solid and well-grounded opinion; but it is at all events a sufficient foundation on which to lay the superstructure of experiment.

Horticulture is probably still in its infancy in this country; but if so, it is the infancy of a giant. How few have hitherto devoted their whole attention to raising new varieties of fruits, flowers or vegetables from seed, and yet we have already, among flowers, the almost unsurpassed *Canella Walderi*, raised by our indefatigable President, with several others of great beauty. The seedling *Pelargonium*, exhibited this spring in the rooms of this Society, are not far from some of the best imported from Europe. In fruits, we may with pride refer to the strawberry, raised by an active member of this Society, which has deservedly acquired so much celebrity.—So many of our native apples and pears, to Mr. Manning's cherries, to several new plums which have been exhibited. I have also tested seedling peaches from private gardens, unnamed and little known, which may successfully vie, for flavor and size, with many European fruits possessed of high sounding titles. And indeed, we have everything to encourage endeavors in this branch—for it requires but little attention from the hand of man to produce these improvements.—Nature has been lavish in her gifts to this climate.

The glorious beauties of our sunsets amply attest the purity of our atmosphere, and the almost tropical sun which rides over our heads during the summer months, perfectly matures the wood, the juices, the pollen and the seeds of our plants. For the grateful shade of other lands, the ingenuity of the Horticulturist here can easily find a substitute, beyond to produce or imitate our glorious sunlight, is beyond the art of those of many other countries. It has been thought that our long winters are a serious impediment to our Horticulture, but it is not so. The very essence of this pursuit is to overcome difficulties, to make the wintry desert blossom like the rose; if every circumstance were favorable, if everything flourished spontaneously, of what value would be the exertions of the gardener? It is the long privation of the charms of Flora and Pomona, by our protracted winter, which makes them so eagerly sought after when they do come. The very length of our winter acts, on the one hand, as a stimulus to the gardener to produce his early fruits and flowers; and on the other hand, increases the desire of the patrons of Horticulture to enjoy them. I believe that it would be a very profitable speculation for the builders of new houses in the country, or even in the town, to contrive, at the back of each, a small greenhouse about 15 by 12, just enough for the inhabitant to employ his leisure hours in cultivating, with his own hand, a few exotic plants. The expense of this structure could not exceed \$400, or \$150, and no doubt many would be found who would cheerfully pay from \$20 to \$50 additional rent for such a true and constant enjoyment. If properly arranged originally, by placing a small boiler in the brick work, at the back of the fire-place in the adjoining room, with pipes containing hot water circulating around it in the interior, no extra expense for fuel, or trouble would be required. Even those who do not delight in exotic flowers, would have no objection if it were a greenhouse, where fine sorts of this luscious fruit might be cultivated in the highest perfection.

There is evidently an increasing taste for plants to decorate the parlor, but the greatest hindrance to their flourishing luxuriantly is the want of vertical light and properly regulated heat; in structures such as I recommend both these difficulties are obviated, and they would no doubt succeed admirably. Those who remember Mr. Towse's well cultivated plants, will not require proof of this statement.

I must also, that, in a few years, attention will be

more directed to the exhibition of true taste, whether in laying out the small garden plot around the house, or in more extensive ornamental grounds. For the cost is the same, whether the labor of planting and making walks be expended in a manner consonant to true taste or otherwise; and the principles of true taste are extremely simple and easy of application. Had time permitted, I should like to have laid down a few of these principles, and also to have said a few words on the subject as essential to landscape gardening, of harmony, which should be studied with an artist's eye, both in the plantation of masses and lines of trees, with regard to their mode of growth and foliage, as well as in the arrangement of the colors of the flower garden. I must also leave untouched another subject of great importance; I mean the scientific arrangement of trees and plants in gardens, an object which, when attained, not only increases immeasurably the interest of a garden, but leads even those unscientific minds, which are strongly imbued with a love of order and arrangement, to enjoy and delight in the beautiful domain of the vegetable kingdom.

It would be wrong, however, to devote all of our attention to the ornamental branches of Horticulture; the useful demands on equal, if not a more extensive share. Perfection in the growth of those healthy luxuries of the dinner-table, vegetables, is a main part of the gardener's aim. The value of one portion of these edible plants consists in the perfection of the early shoots, the stems and the foliage, such as the asparagus, rhubarb, the cabbage, the lettuce, the celeriac, &c.—of another portion, it consists in the perfection of the seed, such as peas, beans, &c.—in a third, the perfection is to be produced in the pulpy or cellular mass which covers and surrounds the seed, as the squash, melon, cucumber, &c.—and, in a fourth, in the perfection of the root, as in the carrot, the beet, the potatoe, &c. Now in the consideration of the national various manners, these points must be the chief objects of study, and it is here that experiments on Guano and other manures seem of importance. If, as appears by the plants exhibited, that the action of Guano is great on the stalk and foliage, then its value should be great in the cultivation of celeriac, rhubarb, &c.; if it be found, as appears to me likely, that it improves the seed, then it will be valuable for peas, beans, &c.

All these considerations induce me to think it probable that we are still in our infancy on these subjects, and that the value of horticultural societies, to nurse this infancy to a healthy manhood, will become every year more and more evident.

But if horticultural societies have done much to advance this pursuit, horticultural publications have perhaps done more. Without such publications many of these societies would not now be in existence, and that thousands of individuals who have found innocent and delightful resources and excitement in Horticulture, would have been ruined at the tavern or the gambling-house,—finally, that it is impossible to calculate the advantages bestowed on mankind by the vast diffusion of a taste for Horticulture, which these publications have mainly contributed to produce. I cannot now enter more into detail of these advantages; besides a very brief instance will elucidate them with more force.

In the *Gardner's Chronicle*, published in London 5th May, this year, there is an account of the method of growing melons, &c. at Guisnesco, on the Spanish coast. The beds are formed on the borders of salt water, which at spring tides is allowed to flow in through channels cut for the purpose, thus inundating the roots. Once a year they are covered with about two inches of night soil, which is forked in in the autumn; in the spring a thick layer of leaves is laid on, through which the asparagus shoots rise, in size from three to six inches diameter, or more than double the size of the finest grown here. Nearly the largest head of asparagus I have ever seen, I found during one of my botanical excursions growing wild on the edge of one of the salt marshes at Dorechester in this vicinity, just where the land rises into little hillocks covered with small wood. Here, with the exception of the night soil, nature's operation closely resembles that followed at Guisnesco; the salt water has occasionally access to the roots, and the shoot's rise through the head of leaves with which the natural defence has protected the root. On reading the account in the *Gardner's Chronicle*, all these facts recurred to my memory, and I have no doubt that some pieces of salt marsh, to which, by a little management, the salt water might be occasionally admitted, could be most profitably converted into asparagus beds, which in luxuriance and produce would far surpass many at present in existence.

5. 2 " " horse manure, " 25½ " " 30th, mowed the grass. 31st weighed it," product as in the above table.

the result of the above experiment shows most conclusively the value of ashes as a manure for grass. *Quere.* Is not the value of the ashes chiefly derived from the potash they contain?

All plants of the grass kind require *silicic acid of ash*,"—Liebig's Ag. Chem., p. 200.

The *silica* or *flint* of the soil is dissolved by the ash of the ashes, this forms *silicate of potash*, which is absorbed by the grasses, forming one of their constituents, as found by chemical analysis. Is this the true solution of the question? I leave it to our intelligent farmers to make the right use of the facts.

R. T. Y.

The *Maples*, Sept. 28, 1842.

Our correspondent R. T. Y. will see in our present number a highly interesting communication translated from the German for our paper, on the use of

lora our friend will see has anticipated his wishes.

Foot Rot in Sheep.

WEYBRIDGE, Vt., June 27, 1842.

TR. EDITOR, SIR:—I have delayed sometime in giving you my mode of managing and curing foot rot in sheep, as requested.

Various opinions have arisen about the foot rot in countries as well as here. Some English authors treatises on sheep husbandry ascribe the disease to wet pastures, to the superabundant growth of hoof, &c. &c. I believe none of these causes sufficient to create foot rot. It is a disease that spread only by an inoculation of the infection, which may be introduced different ways. I have seen flocks of sheep to graze for years in different places, side by side; one flock would be troubled with the rot, the other be always clear of it; and I know flocks to be cured of the disease and period to graze in the same low pastures for years afterwards, and not again become infected. I never did of the disease, and presume it was not known on our continent nor the seaboard sheep, until it was introduced here by the Saxony sheep. If low wet areas will create the foot rot, as it has been asserted by Quat and other writers, why was not the disease among us thirty years ago? All the different flocks of sheep are exposed and liable to foot rot if range in the same pasture when any one of the is diseased, or when any of the infected sheep been in it months previous. It may be mysterious ones with some how they came by the disease. It be communicated by driving them along the high- where a flock of foot rotted sheep passed months ere, or by washing them in the same pen where diseased sheep have been washed. In cold weather now then a sheep will carry the disease for months, and but but little lameness, if any. Those sheep that long hoofs and others with very close hoofs, are difficult to cure, and the most liable to be inoculated, because they are more liable to draw the grass between the hoofs on which the infection has been de- Tightly hooved sheep are more subject to friction, and therefore cannot heal as quickly; lambs and lings are more easy to be cured, because the hoofs smaller and more open.

A sharp pointed knife is the best instrument that be used, and blue vitriol is the best and softest ointment that can be applied, of the many kinds I have tried; different mixtures and medicines, as willow bark, oil of vitriol, alum, butter of antimony, saltpetre, corrosive sublimate, &c. &c. Al- Anystringent or medicine of a dry nature is bad, such as quick lime or dry dust of the road, coal, &c. The infection therefore spreads most in

moist lands and in wet seasons, because there is no dry dust or any thing of a drying nature to operate between the hoofs—however it scarcely ever is eradicated from a flock without some labor and external means are applied. I have known it to leave small flocks in a dry season in dry pastures, and also in winter, because if all the infection freezes, it kills the vitality. In England and Ireland they are less subject to frost and their soil is naturally more moist than with us—therefore the foot rot may be expected to be more prevalent.

Before I proceed farther I will inform your readers that I have cured thousands of sheep so that they "staid cured," unless in some instances they were again exposed by infected sheep getting among them. I have now several hundred sheep on my farm that were infected with the rot two years ago, that were then soon cured by the application of a solution of blue vitriol and zig between the hoofs with a swab, after all the infected part had been thoroughly and carefully pared.

The winter season or when we have frosts, is the best and surest time to cure the infected flocks, because all the infection that leaves the hoof is frozen, and is as surely destroyed as would be the infection of small or skin pox. When of long standing it cannot be entirely eradicated from a flock, especially in warm wet weather, unless they are permitted to range in another pasture where there is no exposure after the treatment. When they are to be examined, it is not only a saving in time but labor to construct a trough out of two boards, set up flaring about fourteen inches from the ground, something like a butcher's trough, in which the sheep are placed upon their backs, where they require no other fastening to keep them quiet while the examination is going on. The horn of every infected hoof must be pared off so far as the disease has got under, and all the feet swabbed whether sound or unsound; and if the application be in winter, the medicines should be warm. If thoroughly done by a skilful hand, the rot will be removed, and the foot healed in less than one week. The diseased animals should all be separated from the flock if it be warm weather, and examined again in five or six days. I have known them to become lame in 3 days after they were inoculated. I never knew a sheep of a strong constitution to die with this disease, excepting that in warm weather the infection getting on the body of the sheep when lying down, creates a sore on the body which becomes infested with maggots, and eventually killing the sheep if let alone. I have prevented its raging in warm weather by obliging them to pass through a trough of vitriol water now and then, according to the state of the disease and weather.

As for sheep ranging in a swamp breeding foot rot, puts me in mind of what I have heard asserted by some people, that a man lying in the woods on a bed of leaves for a length of time, would breed fleas. If I had been informed that they would and could thus breed the rhinoceros, I would the sooner have believed them, because the machinery and mechanism would not be so very minute and complicated but of a coarser kind.

Yours very respectfully,
S. W. JEWETT.

Large Cattle.

We saw the beautiful animal mentioned before repeatedly, from his steerage to his oxbood. We advised his making the Grand Tour. A friend of ours, who had resided in England nearly thirty years, and assumed to be an eminent connoisseur in Cattle, undertook to say he would receive no notice there; and a good deal else indicating how easily prejudice warps the judgment: even in intelligent minds. We

are glad that he proved a false prophet, and that the British agriculturist public have so strongly sanctioned our own opinions. This animal was not of the pure blood, but half blood. He was an exceedingly well-formed animal. We were about to speak of his good points, but he was so fat and smooth, it would be difficult to find any points about him but the points of his hoofs and his horns.

The noble ox belonging to Mr. Ruet, of Syracuse, Oneida Co., is of pure native stock: he weighs 4100 lbs., and is still healthy and thrifty. We had his dimensions taken a year since, at the Syracuse Fair, but as he has grown largely since, we prefer waiting for a more recent measurement before we give them. We apprehend that he is destined to bear the palm from all the mammoth oxen on record. Mr. Godfrey's oxen, (of Geneva,) exhibited at the State Fair at Albany, were most remarkable animals, of astonishing size, fatness, and thrift. There were represented as native stock. We cannot however decide definitely on this point. We shall, as is the fashion in Court Gazette, know more about the movements and exploits of all these Great Folks presently, and shall duly chronicle them.—Ed.

THE AMERICAN MAMMOTH OX OLYMPUS.

This astonishing animal was bred by Isaac Hubbard, Esq., in the town of Claremont, State of New Hampshire. He was sold in October 1837, and taken down the Connecticut river to New-York, from thence to Boston; and was imported to England in the fall of 1838 under a heavy bond to Her Majesty's customs to be re-shipped to America in six months. Her Majesty's government was pleased to extend the Bond; at this period his name was changed, and was called Brother Jonathan. He weighed at New London before leaving the country 3600 lbs. He was sold late in the fall of 1838 to a company of gentlemen for a large sum, who exhibited him over most of England. This beautiful creature was exhibited at the Egyptian Hall, Piccadilly, London, seven weeks, during which time 22,368 persons visited him, including most every branch of the Royal Family, and the leading agricultural noblemen and gentlemen. By special permission he was admitted into the great Fair at Oxford as an American Ox, and over four hundred dollars was received in one day. In 1840 he was slaughtered at Horncastle, his weight being 3700 lbs., and it was the opinion of good judges had he been quiet a few months, with good attention, he could have been made 400 lbs. heavier. He was of the Short Horned Durham breed, and in form considered by connoisseurs to be the most perfect model of his kind; color, Dapple Bay. He was calved January 4th, 1832, and his weight at different periods was as follows:

Jan. 4th, 1833, being 1 year old, he weighed 874 lbs
Dec. 23d, '33, " 1880 lbs. gain 11 m 19 ds 456 "
Jan. 5th, '35, " 1800 " " 12 m 13 ds 530 "
Dec. 26th, '35, " 2250 " " 11 m 21 ds 450 "
Feb. 15th, '37, " 2910 " " 13 m 10 ds 560 "
April 4th, '38, " 3370 " " 13 m 17 ds 460 "
" 40, " 3700 "

PROPORTIONS.

Measuring in length from nose to rump, 11 ft. 10 in.
" Height over fore shoulders, 5 ft. 11 in.
" Girth, 10 ft. 9 in.
" Loins, 9 ft. 11 in.
" Breadth of Hips, 3 ft. 1 in.
" Shoulders, 2 ft. 11 in.
" Girth of fore arm, 2 ft. 6 in.
" Height of breast from ground, 1 ft. 11 in.

GREAT YIELD OF HOPS.

Gordon Avery, in the village of Waterville, Oneida county, N. Y., raised this year on 12 acres of land, 29,937 lbs. of hops. He proposes to challenge the world to excel him as to quantity and quality, on the same quantity of land, for \$1,000—separately—quantity without quality, or quantity without quality, or \$300, on satisfactory evidence.

Cattle Show and Fair at Albany--September 27, 28, 29, 30.

We had prepared the subjoined account of this festival for the last number of the Farmer, but though seasonably mailed, it was unfortunately not received in season. Our account must be imperfect for two reasons: first, because we are necessarily restricted in our limits; the second, because having been placed upon the committee for the examination and testing of ploughs, we were, in the discharge of our duties, for nearly the whole of three days exiled from the field, and had no opportunity of doing more than to take a passing glance at the exhibition.

The Show was held at a distance of about two miles from Albany, in an enclosure of more than twenty acres, known and used as the trotting course. A wide and smooth drive encircled the field. The outside of the drive was occupied by a few booths, though the greater part of the booths were without the enclosure; the ground within the drive was entirely devoted to the objects of the Fair. A large wooden building was erected for the exhibition of dairy products, vegetable products, silk, maple sugar, fruits, flowers, small agricultural implements, such as hoes, spades &c. &c., bee-hives, eocooneries, various models of an agricultural character, specimens of the product of the spinning wheel, the loom and the needle, and many other articles of this description, which the reports of the various committees will hereafter describe. There was on the field likewise a large marquee for the offices of the Secretaries of the Society and the Executive Committee, and the tents of a military company were erected upon the field for shelter in case of rain. The threshing and fanning mills were exhibited in the rear of the enclosure; the ploughs, straw-cutters, corn-crackers, sowing machines &c. &c. &c. in front; two or three ranges of pens were formed for the exhibition of the swine and sheep, and calves; and the principal animals were tied to stakes, within and around the circle. The weather for the three first days was never more propitious. The fourth day, devoted to the public sale of animals and goods, was slightly rainy in the forenoon, but no one was seriously inconvenienced. The attendance during Wednesday and Thursday was very large, not less than 8000 tickets of admission having been sold the first day exclusive of those which were given away; and a badge, which entitled the bearer to a free admission at all times was presented to every gentleman known to be from out of the State. The money received at the gate was exclusively devoted to the actual expenses of the occasion and the objects of the Society. The arrangements throughout were excellent; and although, as was to be expected, and, as in such cases was unavoidable, mistakes may have occurred, and omissions may have taken place which are to be regretted, and improvements may have suggested themselves, which actual experience only could point out, yet the arrangements throughout reflect great credit upon the gentlemen who made them and whose laborious services were all rendered gratuitously, among whom, without invidiousness, may be named, Mr. Tucker of the Cultivator, Mr. Prentice of Albany, Mr. Wadsworth of Genesee, President of the Society, Mr. Nott of Guiderland, late President of the Society, Mr. Beament of Albany, and Mr. Walsh of Lansingburgh. To the latter gentleman is without doubt due the honor of laying the foundation of the Society; and of having watched over and assisted its progress with disinterested and parental assiduity. To several other gentlemen, who cheerfully rendered their assistance on the occasion, the agricultural community are greatly indebted.

The show of ploughs was beautiful; thirty-three having been entered for competition and exhibition.

ful construction. The show of other implements was numerous and respectable. The show of animals, especially of the Improved Durham Short Horn, of the Hereford Stock, of Southdown, Cotswold, Leicester, Dishley and fine Saxony sheep, for quality, at least, has probably never been equalled in this country. The admirable Durham stock of Mr. Prentice and Mr. Vail, and the Hereford stock of Messrs. Corning and Southam, the perfect specimens of Southdown sheep from Mr. Rotch of Batavia, of Cotswold and Leicester from Mr. Dunn of Albany, excited universal admiration. Three of the Cotswold sheep of Mr. Dunn weighed together 889 lbs. There were other fine specimens of sheep, the names of whose owners we could not learn. The swine we had no opportunity of inspecting; but Mr. Lincoln of Worcester, one of the committee, celebrated for his Porcelain skill, will give a full account of them in his own good humor. The horses were on the ground only in our absence. In specimens of native stock, as far as we could see, there was an almost entire deficiency, which was much to be regretted. In fat oxen, though the number was small, yet the show was magnificent. Mr. Ives' cattle were excellent; but the ox of Mr. Rust of Syracuse, and the two oxen of Mr. Godfrey of Geneva may challenge the world for their equals. The live weight of Mr. Rust's ox was 4100 lbs, and he is still gaining rapidly. The famous cow from Maine, for her size and fatness, of her kind probably the most extraordinary animal ever seen, was there for private exhibition. One yoke of Devon working oxen attracted universal attention and admiration. In appearance we have never seen their superiors. But we cannot now farther particularize.

The trial of ploughs took place on a field distant half a mile from the show-field. Fifteen different ploughs were entered for examination. The points to be ascertained were mainly the power of draft required to move the plough, and its general construction, durability, and expense. The dynamometer was applied to each plough, and four different observations taken and the whole compared; but from the imperfection of the instrument, from the nature of the power applied, different teams and different harnesses being necessarily used in different cases; and from the impossibility, with the imperfect arrangements which had been made, of making the trial equal to all the competitors, the committee determined to submit to the competitors themselves, the question whether a decision on the partial and unsatisfactory grounds which the committee possessed, should then be made, or whether the whole matter of premiums in this case should be abandoned until another year, when the society would be expected to make such arrangements for the trial, that the committee might arrive at a fair decision; at least one which would satisfy themselves. The competitors perceiving all the difficulties of the case and knowing how very important to their interests a decision would be, expressed their unanimous desire that the decision for this year should be omitted; and their request that the money designed for premiums this year might be applied to the increase of premiums for the same object at the next show.

The ploughing match for a sweepstake of 100 dollars came off on Thursday forenoon. Ten teams entered the lists; and ploughed each one quarter of an acre. Nine of these were teams of one pair of horses; one, a team of one yoke of oxen. A greater part of the ploughing was admirable; and for its skill and beauty could not be exceeded. The different lots were merely numbered; and no name was known to the judges, who were not on the ground until the teams had left. The points to which their examination was directed, were simply the depth and width of the furrow, and the parallel lines or exactness with

clusively the majority of the committee decided in favor of lot No 1: John Keeler, who drove the entered by Mr. Hillhouse. The plough used in case was from the plough factory of Ruggles, No. & Mason at Worcester, Mass. one of the most extensive establishments for the manufacture of ploughs other agricultural implements in the country. The grounds of the judgment of the committee were extremely limited; but were presented to them by managers. What would have been the decision of the committee had the whole subject of ploughing, the skill of the ploughmen been taken into view have no means of knowing; but the result is have been different.

The society met on Thursday afternoon at the hotel, to listen to an admirable address from Gov. Seward. Its subject was general; the importance of agriculture, its economical and political bearings; its improvements; its debt to science and its prospect of advantage from science, and the value of education to the agricultural classes. In relation to these, though brief, it was sensible, judicious, and profound in sentiment, and perspicuous, beautiful, and new in its style and illustrations. It commended universal attention and respect.

The farmers and others interested in agricultural improvement held a meeting on Tuesday evening at the room of the Young Men's Association, a Wednesday evening a very crowded meeting in the Capitol, for the discussion of subjects connected with agriculture. Judge Sackett of Seneca Falls presided. The subjects considered were the condition of the agricultural classes, their just claims to protective patronage from the government, and especially importance of provision for the education of farmers, the establishment of agricultural schools at permanent farms. The meetings were addressed by Mr. Majum of Boston, Mr. Johnson of Onondaga, Mr. Holcomb of Delaware, Mr. Miller of Virginia, Mr. Peters of Pennsylvania, Mr. Baldwin of Syracuse, and Mr. Stone of New York. Other gentlemen participated in the discussion. The committee of eight, one from each Senatorial district, was appointed to draft a memorial to the Legislature on the subject of Agricultural Education. Meetings were conducted in the best spirit, and evinced a strong and enthusiastic interest in the education and improvement of the rural classes.

An agricultural dinner was given at the Knickerbocker Hall on Thursday evening, where a large party of gentlemen enjoyed, in a high measure, the festivities of the occasion. The sitting was protracted a late hour, and rendered interesting and agreeable by a very handsome and appropriate address from the President of the society, Jas. S. Wadsworth, by speeches and sentiments from Lieut. G. Bradish, Gen. Tallmadge and Col. Stone of York, Mr. Nott, Dr. Beckman, Mr. Vail, G. O. Choates, Mr. Barnard of Congress, Mr. Baldwin of Onondaga, Mr. Marx of Richmond, Dr. Thompson of Del., by a speech in Dutch Judge Van Bergen of Coxsackie, and by a most interesting, loyal, speech from Mr. Ferguson of Dutchess County. Mr. Ferguson, by his excellent humor, the waters of good fellowship, active, bright sparkling through the whole evening. Mr. Albany Co. in this matter, likewise played hand. The company separated in good humor, the best wishes for each other's prosperity, and bright hopes of a repeated interchange of kind feelings and sympathies at the next anniversary.

RAILWAY SPEED.—The lines upon which trains travel at the greatest speed are as follow: Average speed, exclusive of stoppage. North Eastern, 36 miles per hour; Great Western, London and Brighton, 30, Newcastle and

We should like to give all the speeches made at an agricultural dinner at the Knickerbocker Hall on a 25th ult., but our restricted limits forbid; but there was so much heartiness, cheerfulness and good sense in the speech of Mr. Ferguson of Dundee, L. C., that we give his remarks on this occasion, a summary reported in the Albany Argus.

Mr. Ferguson, of Canada, rose to respond on behalf of the visitors from other states, to a very handsome compliment, he said, which the gentleman at the other end of the table had just paid to him. But before I deliver a word or in just (said he) I beg leave, in the spirit of good fellowship, to ask if there is in this room the illustrious chairman of the committee on agriculture? [Laughter.] If yes, if that gentleman is present I will not read one word more until I hear him.

[Renewed laughter.] This allusion there was to Mr. Lincoln on Thursday afternoon, that kept the audience in a roar from its beginning to end. The meeting allusion to it by Mr. F., called up a vivid recollection of all Mr. L.'s very happy points. He is not present," continued Mr. F., in a tone of disappointment. "I then, gentlemen, will tell you why. It is to save his name. [Laughter.] No, gentlemen, I address you as fellow farmers. I have among my fellow citizens, but fellow farmers. As farmers I beg leave first to express to you my deep sense of gratitude for the honor conferred on me, a backwoodsman of Canada, in being permitted to be present at such a meeting as this, and for the pleasure and instruction I have received there. And now, gentlemen, I forget it, that this office of mine is a very difficult and thankless one, and that you may discharge your duty more so faithfully and conscientiously, you are perfectly sure not to give entire satisfaction. At the same time, they who have undertaken that duty have a right to call on the society for whom they act, to support them in their awards, and to see that no undue remarks are made on their judgments."

Having said thus much about my fellow judges, permit me to rub my eyes and look about me and think what a glorious meeting we have had—what an exhibition of states—how great New-York is. Why, ten years ago I would have said all this means to have produced any thing like what we have seen. The result is not in existence here. But it is now, and we will not let it pass. In the great state of New-York particularly—I don't say gradually, I say, but gradually, of circumstances, and one of the happy results of these meetings is to bring the rich into contact with the honest farmer, and to teach the former what nobility and independence is, and where it is to be found. [Cheers.] If independence is to be found on earth—its independence is to be secured, it is within the staff of the plough. There it is. The honest farmer comes into the city, and is bewitched and enraptured by the splendor that meets his eye on every hand. But, gentlemen, what sort of splendor is that? A single shawl, a cravat, a sword, and down they go like nine pins. [Laughter.] The farmer has always a fine reliance. He has his pork barrel and his corn barrel, and his good old wife and children depend on them—real, true, and solid. [Cheers.] Nay more—there you find honest morality, religious virtue, [Cheers.] in their proper form. Who does not know that man, mixed up with them in the excess and excitement of busy life, no more pretends what it is to be an honest farmer, living on his paternal acres? But we must not forget that we were made, thank God, to help one another. We are all links of one great human chain. And I say perdition to the man that would break one of them. [Cheers.] I want to see all men equal in their rights. I live under a monarchical form of government—you may be a republican. But I say we are all brothers. [Cheers.] Mark that—we are all sons of the same common stock. [Cheers.] We are of one common family. I say without fear of contradiction here, that America and Britons have the love of liberty in their hearts. [Cheers.] I say without reference to our living under a Queen or a President. I hope there is no high Canadian Tory present that will go home and tell me. [Laughter.] Do I mistake me—I am a true, loyal, British subject. [Rings of laughter.] What I meant to convey was this—that the great outlines of the two greatest nations in the world are the same. We have our property and lives secured by the habeas corpus and the trial by jury. That is no man's matter. We have an executive head. We have a house of Peers—or a Senate—call it what you please. And we have representatives of the people.

There are the great leading outlines of the constitution of both nations. Why allow anything to make in our hearts, who have every reason as reasons, to go together? who can, at their will, play into each other's hands? I go with the gentleman opposite (Mr. Thompson) as to free trade. But that is a subject for a second and a difficult for me to enter on here. I beg pardon for intruding too long. [Cheers of "go on," "go on," "go on."] These few lines for a long time set on my lips, and so I don't know how to say down. [Laughter.] Because if I had the talent to give vent to it, I am overflowing with matter. [Laughter.]

It has just flashed across my mind, gentlemen, what progress this world is making, and this country in particular. We can know nothing of it. I need not ask here—for who has not read Washington Irving? Who has not read Knickerbocker? [Laughter.] I should like to see how Rip Van Winkle would have fared if he had opened his eyes, after a thirty years' slumber, on the Bull's Head yesterday or today. [Laughter.] He would have seen his eyes a double size, to see the more, a double since he went to sleep down the road. And which would he not have done to have been told that two great nations, by the simple power of steam, had been brought within a fortnight's sail of each other? To see a mother and child, hitherto separated by distance and nothing, brought together, as it were, into close proximity? For there was a time when an American in London was treated as a wild beast, and the Briton came over here, why he was the Devil and all. [Laughter.] This is not so now. As we come to see each other, we come to like one another better than ever before. I have said already, I am a loyal Briton, and I rejoice; I cannot tell you how I rejoice—in the present state of affairs between the two countries. [Cheers.] I assure you gentlemen I am not alone in this. Hundreds and thousands of British hearts are beating with joy at the thought, at the prospect of a termination of all our difficulties. I sincerely hope, gentlemen, that I have no objection in the world, to saying that the Americans in the field—say, on the tented field of the Bull's Head. [Rings of laughter.] That is the field for me. No drilling, if you please.—but the drilling of turnips. [Laughter.]

Gentlemen, I hardly dare trust myself to speak of that glorious man—the Father of this country—to whom allusions were made so long ago just now. Gentlemen, I revere the memory of Washington. If ever there was a Patriot on earth, Washington was the man. [Cheers.] I visited Mr. Vernon not long since, and I am not ashamed in this company to say, how my heart swelled at the sight of that great man's tomb. I could not help repeating, to the astonishment of the man who showed me the grounds— "O how I wish the brave was back to rest." By all the country's wishes, indeed! Who, spirit with dewy fingers said, But you took that hero's hollow tomb, and made it a mere shell for the bones of a dead man. Then I said, "You have been a great deal wrong." But my hands, the truth is true. In fact, I am not ashamed to say, "Then I am wrong, and you are right." To those of us that weeps on this day— And I repeat—

Gentlemen, I forget the rest of it. [Cheers loud and long.]

Mr. F. touched briefly in English on the subject of agricultural education. He felt totally incompetent to say how the subject was to be brought about, but he would say this, that farmers might be educated to do high, and might be kept in their proper position. The point to be aimed at was that much of high talent should be acquainted with the prime and detail of husbandry, and that men who understood the mechanical details should be ignorant of science. He knew an individual, who, like many in London, had acquired a fortune in business, determined to have done with the shop and buy an estate. He closed his books, and down he went to the country. His first inquiry there, as an Englishman's was not to be, was where the nearest butcher's was? [Laughter.] He was told that every gentleman killed his own mutton. "D-d dirty work," said he, "but I'll try." The man knew no more of a country life than the weather-cock on the steeple. [Laughter.] Mr. F. concluded by giving

Domestic Manufactures—Plenty of fuel for children and stock, and the good honest house wife that beats them. [Three cheers given standing.]

Prevention of Stunt.
Percher's (German) Encyclopedia of Agriculture gives the following as the celebrated receipt of M.

Schultz, of Duerri, in the province of Juchre, (Prussia,) for preparing seed wheat so as to prevent stunt in the crop. So efficient was Mr. S. in the efficiency of this method, that he offered a standing reward of a dollar, for every load of stunted wheat found in his field.

For every 500 lbs. of seed wheat, take one lb. alum, 1 lb. copers, 1 lb. sulphate, and one lb. verdigris. Pulverize these ingredients and dissolve them in a sufficient quantity of boiling water. When the solution has become cold add as much more water as will be required to moisten the whole thoroughly. The heap should then be turned several times within the ensuing 24 hours, and well mixed; and it is ready for sowing.

Self-Regulating Stove, invented by E. Foot Junr., Seneca Falls.

A remarkable property possessed by this Stove, is that of governing its own heat, so as to maintain, without variation, the precise degree which may be required.

At the top and near the upper part of the Stove, is placed a brass rod—straight and inflexible. Should the heat rise too high, the expansion of the rod, acting on a lever by which its motion is much increased, is made to close a damper that governs the admission of air. Or should the heat fall too low, the contraction of the rod opens the damper and lets in a full draft. A sufficient quantity of fuel being placed in the stove, its burning is held in constant check by the closing of the damper—consuming no faster than a want of sufficient heat to keep it closed permits: Thus is kept an uniform heat.

The manner in which the degree of heat at which the stove shall maintain itself, is changed, is equally simple, though not so easily described: By merely moving a point, a different degree of expansion, and of course different degrees of heat, are required to close or to open the damper. A dial-plate, like the face of a clock, forms a part of the front of the stove. On this is marked the different degrees of heat required,—and the index being turned to a degree, the stove will immediately adapt itself to that point, and there remain without variation.

And the invention stopped here, there would have been left a defect which probably would have destroyed its usefulness. Should the heat rise so high as to close the damper, and if it then any cause continue to rise above that point, some part of the structure must necessarily give away, or else be so loosely and imperfectly in design as to allow such a variation—or should the heat continue to fall after opening the damper, the same difficulty would be presented. We regret that we cannot show drawings, convey to the reader the simple manner in which these difficulties are removed. The moment the heat should rise above the point of closing the damper, the rod disconnects and detaches itself from it, and so remains until the heat returns again to the same point—when immediately it re-connects itself, and resumes its appropriate duties. Or should the heat fall after opening the damper, the rod becomes disconnected until it returns to the same point. This point, more than any other, will strike the attention of the mechanic. It is said to be before unknown in mechanics, and is as remarkable for its simplicity as its ingenuity.

The stove has various other valuable qualities. It is estimated that from three-fourths to five-sixths of the heat from the fuel consumed in an ordinary stove, is carried off by the current passing through it to the chimney. In this stove, no more air being admitted than is necessary to sustain the combustion, very little current is made, and nearly all the heat is expended in the room. And besides, the smoke and cinders, being long retained in contact with the fire, are mostly consumed.

The fuel in this stove being permitted to burn no faster than is wanted, enough may be put in at once to last 12 or 24 hours. Wood is converted into a bed of charcoal, which gradually consumes, but no faster than is required. A person may go from home, and leave his stove burning the day, or through the night, and when he returns find it at precisely the same temperature at which he left it.

Remedy Against Frost.

It is recommended, in some of the French agricultural papers, to deposit some wet strawy manure in the forks of a fruit tree when in blossom, to protect the fruit from frost. If applied in the evening, it is said, that, should frost occur in the night, it will be visible on the upper surface of the manure, but the fruit buds or blossoms will wholly escape injury.



ROCHESTER, NOVEMBER, 1842.

AGRICULTURAL INTELLIGENCE.

The Monroe Co. Agricultural Society held their Show and Fair in Rochester, on the 25th and 26th of October. It was numerously attended on both days, and showed the zeal of the farmers, which was not cooled off by driving for miles through mud nearly to the hubs of the wheels, the rain of the preceding night having left the roads in a most miry condition for the season. This state of the roads undoubtedly prevented the bringing of many articles and animals, bired and quadraped, to the Fair, which would otherwise have been there; but the show in all respects was creditable to the county, and the city was crowded with farmers, their wives and children both days of the Fair.

We shall leave the several Committees to speak for themselves and give them on another occasion ample room to be heard. There were several highly improved animals and some excellent native stock among the neat cattle. The magnificent Stud Horse of Mr. Weddle, a horse of most remarkable size and power, and designed for labor, attracted universal admiration. A team of four yoke of oxen from Mr. Ayrault, and some other cattle from Perrinton, and other places, of native stock, and of a cross of the Durham with the Devon, would have done honor to any show in the country. The Leicestershire Swine were there likewise, in their glory, fairly distancing the Berkshire; and a family of pigs, five months old, which, within our knowledge, could hardly be surpassed for size, thrift, and beauty.

The show of vegetables and fruits, though somewhat limited, yet in quality we have never known equalled. The cabbages, some of them weighing 31 lbs. each, the sugar beets and mangel wortzel, the carrots and turnips, and the celery and salsafy and apples were magnificent. The products of female industry and skill were numerous and beautiful. If the county of Monroe has many girls as skilful and industrious as the works of some showed them to be on this occasion, she is eminently rich in the best of all products. If one in particular, whose numerous articles of exhibition were of singular beauty and displayed extraordinary industry and taste and skill, but whom we should deem it indecorous to name, is not inquired after early by some of the young farmers of the county, they at least should have a premium for their obtuseness and be honored with a fool's cap and feathers for the next anniversary.

Some axes and pitchforks from the factory of Mr. Barton of Rochester, were of exquisite finish, as also were some ploughs from the machine shop of Ruggles, Nourse and Mason, at Worcester, and Charles Howard of Hingham, Mass. The ploughs may in all respects be safely compared with any made in the country. The number of articles exhibited were limited, but excellent of their kind.

The ploughing match came off on Wednesday about two miles from the city in the presence of a large concourse of interested and grateful spectators. Seventeen horse teams entered the list, and no one was allowed a driver. The land measured 1.4 of an acre. The depth prescribed was 5 inches; the width of the furrow six feet. The time allowed, 60 minutes for horses; 75 for oxen; but racing was wholly pro-

scribed. The work throughout was well done, some excellently well done, though the land was not favorable to smooth work. The report of the committee will be given in full. An iron plough called the Buck Eye, with a curved beam, appeared to move with extraordinary lightness and ease, and made very good work. Howard's plough, for its excellent work, maintained the high character which it has for years had in Massachusetts, where it is known, as one of the best ploughs ever put into the ground.

The customary address was given in the afternoon and the premiums announced, excepting on crops, which are reserved for the winter meeting; and the members of the Society separated, after a gratifying and friendly intercourse, with stronger convictions of the importance of improved agriculture and a quickened zeal for its promotion. The Society was honored by the presence of several distinguished persons and friends of agricultural improvement from the neighboring counties, and it is hoped that at the winter meeting in Albany of the State Society, such mutual arrangements will be made in regard to the times of holding the County Shows on separate days, that it may be in the power of the farmers of different counties to exchange their civilities, which may be as improving, as gratifying to the parties concerned. The shows should begin early in September, and not as now be all crowded into October.

Ontario County.

Ontario Co. Agricultural Show and Fair was attended on the 18th and 19th of October. The 18th was rainy and unfavorable, still the exhibition of valuable animals was more numerous than has before been presented in the county, and the stock of a better description and in higher condition.

The ploughing match was attended on the second day; twenty-three teams entered for the competition. The contest was close, and the judges much at a loss to decide among ten of the ploughmen. An hour and a half was allowed for ploughing a fourth of an acre of land with horses. The first premium was awarded to Silas Aldrich, Farmington. The second to Wm. Otley, Phelps. The third to Charles B. Meek, Canandaigua. The first premium for ploughing with an ox team, the same amount of land in the same time, was awarded to D. C. Bates, Canandaigua. The second to John H. Wheeler, East Bloombfield. Other ploughmen are mentioned with strong commendation.

We should give the whole list of premiums but cannot afford the space. The products of female industry and skill are represented as uncommonly numerous and beautiful. This is what we should expect in this highly cultivated and intelligent county. The specimens of Ontario Co., women, whom we have had the pleasure of seeing, would be all of them regarded as premium specimens in any part of the country, which we have visited. We only say of the Ontario Co. men, that we wish they may be worthy of their wives. This would be glory enough for them. We would not imply that they are not.

We were glad to see the commendation bestowed upon Hatch's broad cast Sowing Machine, for sowing all kinds of grain and plaster; we believe it every way deserving. We have seen several fields sown with it with great exactness and success. We have the testimony of several excellent farmers in its favor, to which we shall hereafter refer. It is of cheap and simple construction, and not liable to get out of order. For the purpose designed, we know no better machine. Mr. Hatch is a resident of Rochester, N. Y. We regretted that prior engagements at other places prevented our attendance at the Canandaigua Show. In the fertility of its soil, in the beauty of its scenery, in its neat cultivation, in its improvements and the intelligence and elevated character of its population, we be-

lieve it is exceeded by no part of the country. The address of Myron Adams of Bloomfield, is much commended for its good sense and practical character. We hope, through our columns, to have an opportunity of furnishing to our readers the whole, or the most valuable parts of it.

Niagara County Agricultural Society Show and Fair.

This was held at Lockport on the 18th and 19th of October. We had the pleasure of meeting the Farmers of this fertile county on the first day. The day began with rain and so continued until the afternoon. Any one, who has seen a half drowned rat or a game cock after he has been dilt in a tub of cold water and left to drip, knows how crest fallen he seems, and what an extinguisher or damper of all pride and ambition such a thorough wetting always proves. If small things may be compared with great, we could not but be reminded on this occasion of an account given us by a distinguished gentleman of this country, who was a guest at Lord Elgin's Tournament in honor of the young Queen, when the rain came down in torrents and the plumes of the gallant Knights hung like wet rags over their shoulders, the noblest ladies of the land were glad of the shelter of even a cotton umbrella, all the gay pride of rank and title was absorbed in the general desire "to save himself who can," and even the brilliant banquetting table in all its profuseness and splendors was deserted, for there was no other way of keeping the fair and sparkling sandals out of the water but by sitting on the benches after the Turkish fashion with their feet under them, a position which, besides its awkwardness, involved the peril of losing the centre of gravity and incurring a general splash. The day and field at Lockport were in some respects not unlike. As to shaking off the dust of your feet, though one may have felt ever so uncomfortably towards the good people of Lockport, it was out of the question; one could hardly shake the mud off unless the foot went with it.

The farmers of Niagara Co., however, turned out in great force. They are no hot-house plants. The show of cattle was quite numerous. Some excellent animals of the Improved breeds and some first rate specimens of the Dishley, Cotswold and Leicester sheep as well as of the fine woolled varieties were exhibited. Some excellent horses and colts were likewise on the ground. From appearances we think we have reason to infer that in no county in the State, all circumstances considered, is the spirit of agricultural improvement more life than in this rich and beautiful county. Our engagements prevented our remaining during the next day for the exhibition of agricultural and horticultural products and domestic manufactures, but we anticipate the pleasure from some friend there, of a full account.

Genesee Co. Agricultural Show and Fair.

This was attended on the 20th and 21st of October, at Batavia. We had not the honor of being presented either for exhibition or premium among the live stock on the first day; but we were on the ploughing ground in due season, on the second. The attendance was very numerous and the ploughing respectable. Three teams only entered, but they displayed a laudible ambition to excel. This is certain to carry them forward in this first of the farmer's arts. These ploughing matches deserve, in the highest measure, the encouragement of the farmers, as they have been found, whenever employed, among the most powerful means, not merely of improved skill in ploughing, but of general agricultural improvement; because they bring the farmers together under circumstances where their feelings and ambition are strongly excited; and this excitement extends its healthful influence to all branches of rural industry and emulation.

The perfection of the art of ploughing is only to be

seen when an Englishman or Scotchman, trained to it from his childhood, gets between the stiffs of the plough, and, after setting the noses of his horses in a right direction, and putting the beam of his plough to the same point, follows on, turning up the soil every where at an equal depth, with an equal width of furrow, and laying it always at the same angle of inclination and marking it out as exactly as a chalk-line would mark it, and finishing it as perfectly as if it had been done by an experienced hand with a spade. He leaves no haulks, no unturned, no half-turned, no broken sods, and exhibiting a piece of work as neat and as handsome as a newly ironed and plaited shirt ruffle or muslin cape, when it comes from the ironing board of a skilful housewife, ambitious to show off her spouse to as much advantage as he appeared on his wedding night. This we call ploughing, and to this perfection there is no reason why, with proper encouragement and effort, we Yankees should not come at last, and all in due season.

We were told by those, who were perfectly competent to judge, that the show of animals the day previous was numerous and excellent; and so likewise of agricultural products. When next it happens, as was said of Gilpin's ride, "may we be there to see." A numerous and highly respectable audience crowded the Court House after the ploughing match to hear words of encouragement as to the improvement of this great art; and the whole occasion was such as to infuse new zeal and courage into those, who have at heart the advancement of this unquestioned and unquestionable object of human comfort, civilization and improvement.

Cayuga Co. Agricultural Society.

The Cayuga Co. Agricultural Show and Fair were held at Auburn on the 12th and 13th Oct. We had the pleasure of being there on the first day and regretted the necessity of denying ourselves the gratification of witnessing the exhibition of agricultural products and the fruits of the garden and the ploughing match on the second day. The show of animals was small but there were precious specimens of the most improved Stock presented by Mr. Sherwood, Mr. Dill and others. Mr. Sherwood's Stock is splendid and some of his animals are perhaps not surpassed in the country. His celebrated bull showed himself in our sheet some months since, and he has about him a stock quite worthy of him. Mr. Dill's haifer exhibited her fair form and figure at the State Fair and received the deserved compliments on the occasion.

It is impossible to particularize in this case; and we shall wait for the official reports. There is a great omission in almost all these cases of exhibition, and that is the want of proper labels on the pens. When an animal is presented for show, his name, age, stock &c. and his sire's name and his owner's name should be placed on a label on his stake or pen; and if a cow, her product and qualities as well as the other circumstances mentioned above should be stated. At present, there is nothing of this and in most cases no one present to give any information. A considerable number of fat cows were shown and to much advantage.

We had the pleasure, if indeed pleasure it can be called, a sad pleasure in truth, of visiting the State's Prison the ensuing day. The condition of its inmates is probably as good as such wretchedness can be made, though dreadful at best. They are well fed, well clothed, and treated with kindness; but the misery and anguish of being thus "buried alive," we may imagine, can be very little understood by those of us, whom God in his mercy has saved from so wretched a lot. The manufacture of silk is carried on to a considerable extent in the prison and with much success. The articles manufactured are chiefly sewings of an excellent and constantly improving quality; the weaving of silk has been commenced under

favorable auspices. We are promised from the intelligent Superintendent, Henry Polhemus, a detailed account of their operations. The greater portion of the material manufactured has been of domestic production, and \$3,50 to \$4,00 are paid for cocoons. Here is a good home market for all that may be produced.

We were led to reflect with unmingled pain upon the suicidal policy which the State has seen fit to adopt in respect to these unhappy victims; not so much on account of the pecuniary loss which the State must suffer by the actual want of employment for a large portion of them, which they must sustain experience under the new system; but far more for the inhumanity which prohibits in all cases the teaching of these miserable beings some useful trade, by which in the event of their being returned into society they may have the means of getting an honest livelihood. In our humble opinion the State could not have passed a more cruel act than to deny this small boon to these miserable men, who, if any upon earth, are indeed objects of true pity. The clamor about State Prison monopoly is about as worthy of notice as if the tailors and washerwomen in Auburn should complain, that the State provides for making and cleaning the clothes of the convicts instead of giving the job to them. If any thing should have been done it should have been not to prevent these people from laboring and not to refuse to teach them a trade, but to charge their labor and the products of their labor at the same rates as are charged out of doors. For ourselves however, we cannot see that the State was bound to do even this. Open competition is the life of all business and the very element of improvement. This legislating for particular trades or parties is unjust to the community; and the manufacturers of silk have as good a right to demand that the State shall abandon this important branch of business as any other body of tradesmen that any branch of manufacture whatever should be given up in the State Prison. Many of these poor fellows, among whom we may admit there may be some of the most profligate and abandoned, are more objects of compassion than of condemnation; and how can we under the pretence of administering a reformatory discipline be willing to turn them adrift upon society without character, without money and without any honest means of livelihood, that they may be secured against those temptations to crime, which may otherwise, soon bring them back to their solitary dungeons. The cry of such inhumanity must not go up to Heaven. The State, we think, cannot too soon retract its steps. These men, wretched, criminal, and abandoned as they are, have in that very condition the strongest claims upon public compassion and care.

Auburn as a town or village has few superiors. Its wide and well-built streets, its spacious and splendid blocks of stores filled too overflowing with goods, its handsome public buildings and hotels, and its many extraordinarily careful and beautiful private residences, render it peculiarly attractive as a place of visit or habitation. This is our only visit since 1825 excepting the pigeon-flight through its suburbs by the rail road cars. Its progress and improvements are most remarkable.

Wayne County Agricultural Society

Held its annual Fair on the 5th and 6th days of the eighth month, at Palmyra. The increase of general interest was shown by the many hundreds of our most intelligent farmers and other citizens who were present, from all parts of the county.

The first day was devoted to the exhibition of domestic animals. Not less, probably, than a hundred head of cattle were upon the ground, including several full-blood Durhams, many half-blood, and some very fine specimens of native breed. It is to be regretted that the reports of the Committees did not specify the breeds; among those however, who exhibited the best Durham cattle noticed, were Wm. R. Smith, John

Baker, and Thomas Wright of Macedon, Wm. Swails of Solus, Dr. Button of Newark, James Dunn of Lyons, and others. Several very fine horses were also exhibited; the premiums were given to C. D. Culver of Macedon, for the horse "Young Turk," and to Dr. May of Palmyra, for the Morgan horse "Tiger." Other fine horses were exhibited, among which were the celebrated imported horses Alfred and Samson, the former belonging to Thomas Weddle of Rochester, and the latter to John Robinson of Palmyra. There was a marked difference in the collection of sheep and swine, although some beautiful Berkshires were noticed, and some fine specimens of sheep of Leicester, and Saxony breeds.

The second day was occupied with the exhibition of Fruit and articles of Domestic Manufacture. These were exceedingly creditable, though the collection was moderate. Several very fine fruits were noticed—the peaches were far better than any at the State Fair at Albany; and some of the apples were very excellent. Pears and grapes were quite deficient. Among miscellaneous articles, were noticed very fine specimens of carpeting, flannel, and hearth rugs; excellent cocoons from E. B. Blakesly, Newark; some very fine vegetables; and a highly finished two-horse lumber wagon, varnished, but unpainted, showing the surpassing strength and excellent quality of the timber employed in its manufacture, from Sherman & Crandall of Palmyra.

The ploughing match was on the morning of the second day, and afforded great interest and gratification to the many hundreds of spectators who were present. The ground was a sward, the soil a sandy loam, the quantity of land for each team a quarter of an acre, to be ploughed full six inches in depth, in one hour. The excellence of the ploughing, or at least a part of it, excited the admiration of all; work of equal quality, it is believed, is rarely witnessed on similar occasions. The first prize was awarded to John Robinson of Palmyra, (B. Brown, ploughman,) and the adaptation of the Samson breed of horses, at least for ploughing, was most satisfactorily shown by the ease with which a pair of half-blood, only three years old, plowed their quarter of an acre, in about fifty minutes, and took the first prize. It was observed with satisfaction, that no inducement was given to hard driving, by offering a reward on speed, a specified time merely being required.

The report of the several Committees, being in most cases unaccompanied with any statements of the peculiar management, or of the breeds, which drew the premiums, but merely of the names of the successful competitors, and only of local interest, and are consequently omitted.

On the whole, a greatly increased zeal is awakened in support of the Society, and of the Agriculture of the county, and there is every reason for it. Wayne county possesses great advantages, and remarkable susceptibilities of improvement. With a rich sandy-loam soil, not so heavy as to bake nor so light as to lack strength, and a marly, fertile sub-soil; with occasional beds of peat and marsh-muck, scattered over its surface, and sometimes shell marl, affording immense resources in the manufacture of manure,—there is every inducement for skill, enterprise, industry, and thorough farming. And in a horticultural point of view, the advantages are not inferior, for in addition to the excellent adaptation of the soil, the climate is greatly softened, and severe frosts, destructive elsewhere, are prevented by the proximity of Lake Ontario.

Then let her "GO AHEAD!"

Note.—It is proper to say that in noticing meritorious animals and articles above, others may have been equally so, which the imperfect observation of a single individual may have overlooked. Those matters only most interesting to the writer are noticed, and very few have no partialities. J. J. T.

No 13. A fine Berkshire sow and two pigs, owned by Mr. Gibson of Albany.

No 14. Another fine Berkshire sow and four pigs, owned by the same.

No 20. A splendid breeding sow of the Berkshire and Cheshire, owned by Mr. Fox of Albany.

MACHINES, &c.

Threshing—1st prem. to John A. Pitts of Albany; 2d, to Mr. Stafford of Syracuse; the diploma to Mr. Bostwick.

Straw Cutter—1st prem. to Mr. H. Wey, Worcester; 2d, to J. Standish, Fishkill; 3d, to Bots and Harbott, Richmond, Va.; 4th, to R. Sinclair & Co., Baltimore.

Horse Rakes—2d prem. to I. Dornier, Castleton; 3d, to Lewis Simmons.

Fanning Mills—1st prem. to I. E. Grant, of Schaghticoke; 2d, to Plimpton W. Dickie, of Phelps; 3d, to J. L. Ballack, Guilford.

Harrows—1st prem. to Marcus Adams, Monroe; 2d, to Christopher Proctor of Bethlehem; 3d, to D. Caley of Bethlehem.

Cultivators—1st prem. to J. H. Koons, Rensselaer; 2d, to Ruggles, Nourse & Mason, Worcester; 3d, to Elmhurst Elmer, Delin.

Corn Crushers—1st prem. O. Hassey; 2d, R. H. Sinclair; 3d, James Murray.

Corn Shellers—A diploma to J. A. Whitford, Saratoga Springs.

Hay and Cotton Press—A premium to W. S. Jacks, of Catskill.

Thermometer Churn—A premium to Mr. Crowell, of Lime Rock, Ct.

Self-acting Cheese Press—A premium to Collins and Stone.

Hoes—A diploma to H. Clark of Rensselaer.

Pumps—A diploma to Augustus Thayer, Chatham.

Horse-Shoes—A diploma to Henry Barden, of Troy.

Pronging—A discretionary premium or silver medal to Daniel Caley of Bethlehem.

We understand that a very superior Ayrshire Bull, Cow, and Calf, recently imported, were exhibited at the Fair, by the Hon. A. Van Bergen, of Coxsacke. Had not the several committees been misinformed as to the breed of these animals, they would have received premiums beyond all question. We are glad to learn that they have been purchased by our fellow citizen, Joel Rathbone, Esq.; and we congratulate the farmers of Albany county upon this valuable addition to the already numerous herds of imported cattle in our vicinity.

Among the horticultural exhibitions was a case of Fruit from the garden of A. T. Van Slyke, Esq., of Coxsacke, Greene co., containing six splendid bunches of foreign Grapes, the Black Hamburg, and eight very large Peaches, taken from a seedling tree of two years' growth, the largest measuring nine and a quarter inches, and the smallest eight inches in circumference.

Jones' Patent Silk Reel.—Amongst the results of inventive genius exhibited at the Fair of the Agricultural Society, there was none with the simplicity, compactness and beautiful operation of which we were better pleased, than the *Silk Reel* of Messrs. A. B. & W. H. Jones, of Manchester Conn. The whole machine does not exceed a cubic foot in size, and is novel both in its construction and mode of communicating motion, having for this purpose neither gearing, belting nor banding, and hence is not liable to get out of order. It winds the silk from the cocoons upon small barrels, and runs two threads at a time, which cross each other between the first and second guides, precisely like the Piedmontese Reel.

When dry, the silk can be slipped off from the barrels in small circular skeins which will preserve their shape to be packed and transported any distance, and can at pleasure be unwound with as much facility as yarn is taken from the ball, and without any liability of breaking or losing the end. It thus virtually performs the two-fold operation of reeling and spooling at the same time, as it is doubled and thrown immediately from the barrels in small circular skeins. Another recommendation of this reel is the expedition and consequent cheapness with which it reels. A mere child, whose services may be had for six cents per day, can easily turn it. The cost of a machine we understood was twelve dollars.

Extraordinary Crop of Field Peas.

On the 29th of April last, I sowed four acres of the short pod English pea, on ground that was used for corn two years previous. The ground was not manured.

The ground was plowed once, and harrowed twice. The soil was black and mucky. The quantity of seed sown on the acre, was three bushels. In August they were harvested. I threshed and measured the quantity grown on one acre, which was an average of the whole, and found they measured 88 bushels, of an excellent quality.

DAVID WASSON.

Leicester, Lin. Co., Oct. 4, 1842.

SOUTH BREVICK, ME.

Oct. 13, 1842.

MR. H. COLMAN, Sir:—There has recently come into my possession an old account book, in which I find the weight of cattle, slaughtered, Nov. 1790—nearly 50 years since. I will give you an abstract, that you may publish it in your paper, if you see fit, in contrast with the weight of a cow and heifer, slaughtered in December last, belonging to Hon. Charles N. Cogswell.

HATCH ON.	PERKINS ON.	HUSSEY COW.
Nov. 1790.	Nov. 1790.	Nov. 1790.
Quarters, 233 lbs.	Quarters, 95 lbs.	Quarters, 61 lbs.
" 71 "	" 29 "	" 49 "
" 73 "	" 107 "	" 63 "
" 73 "	" 106 "	" 63 "
Hide & Tail, 72 "	Hide & tail, 102 "	Hide & tail, 61 "
361 "	511 "	521 "

JOSHUA EMERY'S OXEN.	
Nov. 1790.	Nov. 1790.
Quarters, 67 lbs.	Quarters, 97 lbs.
" 161 "	" 97 "
" 119 "	" 97 "
" 111 "	" 97 "
Hide & Tail, 88 "	Hide & Tail, 55 "
564 "	459 "

Hon. C. N. Cogswell's Cow, Dec. 1841, 772 lbs.

Hon. C. N. Cogswell's Yearling Heifer, Dec. 1841, 562 "

Hon. C. N. Cogswell's two years old Heifer: live weight, 1174 "

The slaughtered heifer was about twenty months old.

Your Friend,

CHAS. E. NORTON.

For the New Genesee Farmer.

Mowing Land—an Experiment.

MR. H. COLMAN—Dear Sir:—There is no principle better settled, or that receives more fully the assent of mankind, than the axiom, that "Experience is the best teacher of Wisdom." The most beautiful theory in philosophy, morals, politics, or agriculture, oftentimes proves, in practice, to be a mere illusion of the brain—incapable of any practical utility. As in the question proposed to the Philosopher, "If my white sheep eat so much more grass than black ones?" the profoundest scholars have often mistaken some of the most common circumstances and operations of every day life. But the theory deduced from close observation and experience, and from the actual operation of nature, can hardly be mistaken, or as the Poet very pleasantly expresses it:

"Thine every object of creation,
My furnish hints for observation;
And from the most minute and mean,
An inquiring mind can wisdom glean."

Having recently noticed the result of an experiment in farming, which, although it may be quite common in some parts, we had never tried or seen before, and which resulted quite satisfactorily to us—somewhat to our disappointment—I thought it might be useful to the numerous readers of your widely circulated and very popular paper to have an account of it.

My father is somewhat of an experimenting and observing farmer, as you have remarked in your peregrinations in our country as Agricultural Commissioner of Mass.; an office which the farming interest of the old Bay State ought to have continued and sustained. He had a piece of mowing land near his house, of loamy soil, which, having been mowed for several years, had become turf-bound, and did not produce a good crop.

The crop of grass in 1841 was not more than half a ton per acre. Soon after it was mowed, about the first of August, (1841,) he turned it over very carefully, with one of Ruggles, Nourse & Mason's best ploughs. It was then rutted, harrowed, and manured with about 20 loads to the acre of well prepared compost manure, then harrowed again—seeded down with a large quantity of clover and herds grass seed—harrowed again, and completed by rolling. The grass seed came up well, but was put back somewhat by the dryness of the weather. The winter was uncommonly destructive to clover, and most of it was killed out. In the spring, (1842,) it looked rather poorly for some time, the season being cold and dry. But in the commencement of the warm and rainy weather, it grew amazingly; and on the latter part of July, he cut, at least two tons to the acre, of clean herds grass with a mere sprinkling of clover, the clover having been mostly killed out by winter, as I said before; a quantity more than twice as much as he would have cut, had he not plowed it.

After the first crop was cut, the weather continued warm and moist, and he has just cut the second crop of at least a ton to the acre, making not less than three tons to the acre, this season.

The experiment has succeeded beyond our most sanguine expectations. We supposed we should nearly lose the grass the first season, but hoped to gain by it afterwards. But instead of that, there has been a gain the first season of more than 200 per cent. in the quantity of grass.

Hay being one of the most profitable crops we can raise in this section of the country, it is a great desideratum to be able to lay down lands to grass without being compelled to cultivate them with corn, potatoes, oats, &c., for three or four years, thus losing the crop of grass for that time. I think that on level, loamy lands, this kind of agriculture may be practiced with success and profit.

The crops generally, in these parts, are uncommonly large. The first crop of grass was about an average one. Rye was good, and corn has ripened well and is good. Oats were very large, and the second crop of grass. I have never seen so large before. The continued rains of August and the first half of Sept., have made our pastures excellent and fall feed abundant.

Notwithstanding the vetos of the Bank and Tariff Bills, a good Providence has continued to smile upon us, and our barns and granaries are full to overflowing. And now our greatest trouble is, our crops are so abundant that prices have fallen very low. Not even the final passage of the Tariff Bill, which increases the price of most things the farmer uses, but gives him not a cent more for his produce, and diminishes the foreign market for his grain, can save us from low prices when there is an abundant harvest. Verily, man is ungrateful, but God is ever good!

We are highly pleased with the "New Genesee Farmer," under the management of its new Yankee Editor. May long life, good health and abundant prosperity attend his efforts to promote the best interests of that large and most important class of our fellow citizens—the Farmers of the United States.

H. W. C.

Barnardston, Franklin Co., Mass., Oct. 1, 1842.

P. S. An experiment of irrigating land on a scale somewhat extensive is being tried in this town, which seems to promise valuable results, and of which I will give you some account hereafter if desired.

We are very much obliged to our good friend for the above account, and heartily reciprocate all his good wishes and kind regards to him and his. Like O. T., we ask for more. This is not half enough.—Ed.

Seneca County Agricultural Society.
This Society held its Show and Fair at Waterloo on the 20th and 21st inst. The occasion was respectably attended. The show of animals was small; but those of Mr. Bacon of Waterloo, Mr. Johnson of Fayette, and Mr. Sackett of Seneca Falls are among the best of the Improved Short Horns. A Short Horn bull belonging to Mr. Dunlap, we believe, of Ovid, eighteen months old was a very remarkable animal for his size; perhaps few have exceeded him, if ever he has in this respect been excelled, and in other points he was to be commended. There was another remarkably fine bull on the ground of excellent proportions. His length and depth were remarkable; his age 5 years, his color white and brown; but his owner's name not known.

The horses shown on this occasion as a whole were uncommonly fine. We counted ten in the ring, and some of them pre eminent for their beauty, especially a bay colt three years old, and a dark sorrel horse of admirable form and carriage. The horse of all work is undoubtedly the horse for the farmers of Western New York, but this is not incompatible with beauty of form and high mettle. We cannot for the sake of the improvement of the breed of horses desire to see horse racing introduced; this in general is the improvement of the horse at the serious expense of the deterioration of the man, and it costs therefore a good deal more than it comes to. But we are always regretting that the fashion of riding on horseback for men and women, the most healthy, manly and beautiful of all forms of exercise, should be almost entirely superseded by the fashion of riding in carriages, and especially in what are usually called Carry-alls, significantly denominated by a humorous friend of ours, Kill-creatures, where a man at the expense of his poor horse feels bound to take in his wife and his wife's maiden sisters and perhaps a neighbor's wife and all his children though his family should be as numerous as that of John Rogers, the martyr in the primer, consisting of nine small children and one at the breast, which leaves the question somewhat unsettled whether there were nine or ten. This abuse of these dumb creatures is fatal to all improvement of the breed; but the fashion of riding on horseback and treating our horses better, and grooming them better, for sure most of them are scarcely groomed at all, would essentially promote the improvement of the race. Whether this is to be expected or hoped for we shall not venture to predict.

The cruelty with which this noble race of animals is often treated is most shocking. Any one, who will look at the galls and wounds upon many of our stage-horses and our canal horses will see reason to wish, that if any thing can be effected in that way, an association for the suppression of cruelty is as important as for almost any other object of moral reform. We have recently witnessed cases of cruelty in which we feel that we did great dishonor to the poor beasts in speaking of brutality as a term of approbrium for man-analy infinitely transcended it in odiousness; and we could only desire as a just retribution, that the poor, oppressed, abused and mangled animals might lay their hoofs upon the breasts or heads of their persecutors so gently as not quite to take life, for we should be sorry to have these wretches put out of misery at once, but to come so near to it that they might be at no loss to understand what blows and bruises mean, whether applied to horse flesh or man flesh. These instances show how little man is to be trusted in any case with absolute power, and what a curse would come upon the world if man could ever approximate what they so constantly desire, that is, independence, and any man were permitted to do as he pleased. The world could hardly contain such a monster as he

would be likely to become, as we see in the case of the despotic Roman Emperor, who wished that all men had but one neck that he might cut off the head of all at a single blow.

There were shown at the Fair at Waterloo, some draining tile made of clay and well baked—about 14 inches in length, 4 in width, and perhaps 5 in depth—forming half a circular tube with the sides somewhat extended. They were made by Benj. F. Whartnaby of Waterloo, and could be afforded at 30 cts. per rod. This would be a cheap mode of draining. It is generally thought only necessary, after the drain is dug, to lay them on the ground where the subsoil is hard. This we believe is an error. It has been found so in England, and many drains laid in this way it has been found necessary to take up; the water passing under the tile has softened the bed and the tile has gradually sunk down until the water course became filled up. It may cost more at first, but we should recommend in all cases laying a flat tile at the bottom to receive the circular tile. These flat tile would cost but little and a drain thus laid would last for ages. The introduction of a thorough system of draining promises the greatest improvement that our husbandry has yet seen and is destined to quadruple our crops.

From the excellent farm of Richard P. Hunt, we saw specimens of mangel wurtzel, ruta baga and especially the white carrot, which certainly spoke at the top of their voice in behalf of the excellence of the soil and the skill of the cultivator. We pronounced them at once of the mammoth variety, for no other name would suit them.

Some farmers' wives and daughters were there with very fine specimens of their handy work, and themselves very fair specimens of even a finer workmanship than their own. Some needle work wrought at the paragon was beautiful; there were handsome specimens of silk, hosiery, flannels, &c. There was a specimen of flax, perfectly cleaned of the hull by first being steamed and then passed through a machine for the purpose, which is likely to prove a great improvement over the old system of rotting and batchelling.

There were likewise exhibited some beautiful pieces of broadcloth manufactured by the Waterloo Woolen Co. of an excellent quality; and not the least interesting circumstance of this part of the exhibition, was the polite desire of the company that we should choose for ourselves a suit from their best fabrics. We gratefully and respectfully acknowledge this substantial civility; and shall wear it with pride and pleasure. Our only fear is that it may so much stimulate our self-esteem, so intimately associated with the love of country, that our hat may not be quite safe on our head in a high wind.

If the show of quadrupeds on this occasion was limited, the show of bipeds was numerous and respectable. The farmers held an agricultural meeting in the evening at the Court House between the days of the Fair. Judge Sackett, the public spirited President of the Society, presided. Several farmers poured out the rich treasures of their experience, and the evening passed off in a most instructive and delightful manner. Such meetings should be multiplied. They should always be connected with the Fairs; and might be rendered not the least attractive nor the least useful part of the occasion.

Waterloo every where indicates a rapid and healthy growth. Its Academy on the green promises to furnish the ample means of a finished education to a large number of both sexes. The building itself is well worth a visit. It displays great architectural taste and elegance, united with all the conveniences in a compendious form, desirable in such an

establishment. Let the Farmers not forget that education, substantial education, is an object which cannot interest them too much and towards which they cannot be too liberal, as the great and in truth the only instrument, next to good morals, of elevating and improving their profession and condition.

Oneida County Agricultural Society Show and Fair.

The Rome Sentinel gives a brilliant account of this occasion held at Rome on October 12th and 13th. It seems to have gone off with great eclat. "The Church," it is said, "was crowded to overflowing with one of the most intelligent assemblies of farmers, their wives and daughters, and other citizens, we have ever witnessed on similar occasions." An address was delivered by B. F. Johnson of the Central Farmer, which we can have no doubt was worthy of the occasion.

The ploughing match was attended by 2000 spectators, and as it should be, by ladies and gentlemen; for what more beautiful, innocent, and exciting pleasure, than a fair field and a spirited competition, where no cruelty is permitted and the whole tendency is the improvement of the best of all arts. Seventeen competitors entered the field.

It seems by the votes passed to have been an extraordinarily thankful occasion; and night, we should think, answer for the General Annual Thanksgiving for the year, if our good Governor does not appoint any other; for they, it seems, besides thanking the orator passed special resolutions of thanks.

To the Hon. President of the Society.

To the Corresponding Secretary, the Recording Secretary, and the Treasurer.

To the Chairman of the Committee of Arrangements.

To the young gentlemen, "who acted as Clerks and rendered such valuable aid during the Fair;" and we have no doubt to the Fair likewise, for which we presume the ladies thanked them.

To the keepers of public houses, in the village of Rome.

To the Vernon Band for their attendance.

To the Trustees of the First Church, for the use of their house.

This was certainly doing the thing up in handsome style; and will make the Society welcome, whenever its anniversary comes round.

The number in attendance was estimated at 10,000; and we now vote ten thousand thanks, that is a thank ye, to each of these good men and women, who thus encourage the best of all pursuits for comfort, happiness, and morals; and thus, by their presence and acclamation, "speed the plough."

We cannot give the premiums on animals—but we note some on crops.

Premiums were given on Winter Wheat, for 241-2 bush. per acre.

On Spring Wheat, for 311-4 bush. and 27 bush. per acre.

On Indian Corn, for 94, 91, 85, 83, 78, 71, bush. per acre. These crops are highly creditable.

On Oats; 1121-2, 94, 86, 79, bush. per acre. These crops are excellent.

On Barley; 64 53 1-4, 453-4, bush. per acre. The first crop is unusual.

On Rye; 33 bush. per acre; certainly a good crop.
On Potatoes; 435, 151 bush. per acre; rated at 60 lbs. per bushel. In giving a premium in these cases, we see the Committee decided upon the principle adopted by a clerical friend of ours in respect to his congregation, which was very sparse;—"What," said he, "they want in number, they make up in character."

On Potatoes for quantity per acre, entries were made for 693, 432, 396, 372, 368, 360, 337, 232 bushels.

We see no Robans among the number; so transient is popularity among potatoes as well as all other earthy things. We believe, however, they were represented afterwards; and also potatoes called "Perfectionists"; of Mormons, none appeared; they belong, we believe to a side-hill in Ontario county.

On one crop of Ruta Baga, of one quarter of an acre, at the rate of 284 bushels per acre. To give a premium on such a crop as this would, we should fear, disturb poor Cobbett's bones in his grave.

On Sugar Beets, 379 bushels. On Mangel Wortzel, 115 bushels.

On Carrots, 554 bushels per acre. We have grown a thousand bushels, and we have known crops at the rate of 1390 and 1780 bushels per acre. Premiums were given on silk, flannel, and Sugar all of which were pronounced excellent. Sugar always finds favor. This Committee are always a tasting Committee; and we defy a man to say an unkind thing with a large lump of sugar under his cheek. We have never yet seen the woman that could scold her husband with a piece of double refined loaf sugar in her mouth, and we recommend it as a preventive.

Various other articles were honored; but alas! a pair of white German Geese were overlooked. Strange they had not asserted their rights among other pairs of geese, which possibly may have been there. The Romans! the Romans! of all people in the world to overlook the geese. Base ingratitude! The old Romans never forgot the descendants of their distinguished benefactors, who saved the Capitol. They made the Goose the object of their idolatry. Sad degeneracy among these modern Romans!

A premium was awarded to a lady for a pair of embroidered Ottomans, for which 80 dollars were offered. This illustrates the hardness of the times. The lady, we would remind the young men, is single from her name; and a pair of ottomans seems to imply a spare seat for somebody.

A premium was awarded for a very superior bed-quilt to a lady, the maker of it, with but one arm. So fertile is human ingenuity in meeting emergencies and rising above difficulties.

Last of all, a premium for a *Climax* Cooking Stove. This must be a curiosity. We can imagine nothing farther than has been already accomplished; but this we presume not only cooks the dinner but serves it up at the same operation.

The occasion seems to have been most auspicious.

To Correspondents.

We have a valuable and valued communication from Flora for our next number. J. T. Y. will find his wishes, in which we cordially join him, in this matter anticipated. We hope to hear from him again and often. Our friend Horsefield's communication on Mediterranean Wheat will appear in our next. We do not much differ in opinion.

We thank our friend J. K. of Portsmouth, for his letter on the different breeds of Poultry.

"The cock with crow
To let you know
What time to rise."

Right glad are we that his crowing has waked our friend up, from whom we should be glad to hear often.

Communications from W. G. and W. B., on the Protection Policy, designed for this number, together with many other articles are necessarily excluded for the present, as well as several accounts of cattle shows in this State, and New England. We are pained to say to our respected Correspondent, J. S. D., that it was intended to have inserted two more of his letters in the present number; but our compositor being suddenly called away a distance of 500 miles by the death of his father put them where they could not be found by the most diligent search.

Several communications from J. D., E. H. S., and others, are on hand for future use.

Fruit Trees.

It is a common practice with the farmers of this section to set out fruit trees on old land, and seed it with timothy or clover seed. In a few years the trees become stunted and have rough mossy bark and yellow leaves, showing every sign of starvation. In this way thousands of young fruit trees become worthless to their owners and useless to the soil. This is probably owing to the hardness of the soil, not being plowed often, and to the encroachment of the roots of the grass on the roots of the trees, so that in a few years the roots of the grass become matted around the trees. Farmers who have such orchards should immediately plow them up; and if practicable set out new trees. If not, clear the grass away from the trees and put well rotted chip manure around them or leaves gathered from the forest will answer the same purpose.

Fruit trees, especially those which are young, should be hoed or plowed around at least once a month during the spring and summer. I know of no reason why the sub-soil plow would not do well for land that is intended for orchards. It would certainly save labor in setting out trees in a hard or clayey soil.

II.

Our correspondent H., wishes some information in regard to the use of ashes. He will find a highly interesting communication on that subject, in the paper of this month, translated from the German for the New Genesee Farmer. We know not where to commend him to any thing more instructive. We publish his suggestions in regard to fruit trees that we may bring the subject to the attention of the farmers, not that they present any thing new in relation to the subject. Fruit trees need as much and as careful cultivation as any plants which grow out of the ground. There can be no question that the use of the sub-soil plow, together with every other method by which the soil can be broken, or kept loose, would be beneficial.—Ed.

We publish below from the Seneca Falls Democrat an account of a Stove invented by E. Foote, Jr., of that place. We subjoin likewise a letter from a gentleman at whose house we saw the Stove in operation. We believe from what we saw, that it is a highly valuable improvement, both as it respects economy and comfort. It is now a days with stoves, both cooking and parlor stoves, as it is with ladies' bonnets. The man, who purchases one of the latter must hurry home, or the fashion may change, before it can be mounted. Such rapid changes are constantly taking place in all kinds of heating apparatus, that it is very difficult to keep pace with them, and a man feels hardly safe in buying one with certificates to its efficacy as numerous and long as the joints in the funnel. A friend of ours declared he would not buy a cooking stove until "they had done making improvements," but as the hymn says, "he died without the sight." We believe Mr. Foote's Stove an excellent machine and answering its purpose well. We cannot say that better will not be invented. We know that many worse have been. What Mr. Davison means by burning a cord of wood a week in a Franklin Stove we do not well understand, unless he was engaged in clearing land, or trying to heat the large room outside of his house, and help Professor Espy in some of his philosophical experiments—otherwise he ought to be indicted for extravagance; and we are quite certain he has never had the luxury we have had of paying eight dollars a cord for wood besides the sawing.—Ed.

SELF-REGULATING STOVE—INVENTED

BY E. FOOTE, JR., OF SENECA FALLS.

A remarkable property possessed by this Stove, is that of governing its own heat, so as to maintain, without variation, the precise degree which may be

required. Within and near the upper part of the Stove, is placed a brass rod—straight and inflexible. Should the heat rise too high, the expansion of the rod, acting on a lever by which its motion is much increased, is made to elase a damper that governs the admission of air.—Or should the heat fall too low, the contraction of the rod opens the damper and lets in a full draft. A sufficient quantity of fuel being placed in the stove, its burning is held in constant check by the closing of the damper—consuming no faster than a want of sufficient heat to keep it closed permits. Thus is kept an uniform heat.

The manner in which the degree of heat at which the stove shall maintain itself, is changed, is equally simple, though not so easily described: By merely moving a pointer, different degrees of expansion, and of course different degrees of heat, are required to close or to open the damper. A dial plate, like the face of a clock, forms a part of the front of the stove. On this are marked the different degrees of heat required—and the index being turned to a degree, the stove will immediately adapt itself to that point, and there remain without variation.

And the invention stopped here, there would have been left a defect which probably would have destroyed its usefulness. Should the heat rise so high as to close the damper, and then from any cause continue to rise above that point, some part of the structure must necessarily give way, or else be so loosely and imperfectly made as to allow such variation.—Or should the heat continue to fall after opening the damper, the same difficulty would be presented. We regret that we cannot, without drawings, convey to the reader the manner in which these difficulties are removed. The moment the heat should rise above the point of closing the damper, the rod disconnects and detaches itself from it, and so remains until the heat returns again to the same point—when immediately it re-connects itself, and resumes its appropriate duties: Or should the heat fall after opening the damper, the rod becomes disconnected until a return to the same point. This part, more than any other, will strike the attention of the machine. It is said to be before unknown in mechanics, and is as remarkable for its simplicity as its ingenuity.

The stove has various other valuable qualities. It is estimated that from three-fourths to five-sixths of the heat from the fuel consumed in an ordinary stove, is carried off by the current passing through it to the chimney. In this stove, no more air being admitted than is necessary to sustain the combustion, very little current is made, and nearly all the heat is expended in the room. And besides, the smoke and cinders, being long retained in contact with the fire, are mostly consumed. The fuel in this stove being permitted to burn no faster than is wanted—enough may be put in at once to last 12 or 24 hours. Wood is converted into a bed of charcoal, which gradually consumes, but no faster than is required. A person may go from home, and leave his stove through the day, or through the night, and when he returns find it at precisely the same temperature at which he left it.

SENECA FALLS, JUNE 24, 1842.

DEAR SIR:—I send you herewith one of our village newspapers, containing as full an account of the mode of operation of Mr. Foote's Self-Regulating Stove as I could give you.

When in Seneca Falls, you saw the room in which I used the stove; it is 18 by 20 feet square. My house is not a warm one; it is built of wood, and admits considerable air. Previous to getting this Self-Regulator, I used a common Franklin. In this the consumption of wood was near as I can remember, was one cord per week during the four colder months. I have made a number of experiments with the Self-Regulator in the same place, and have uniformly found that one solid foot of good wood was an abundance to keep a thermometer in my room at 70 degrees, 24 hours that amount per day, (incredible as it may seem,) I think would be a full allowance for the whole winter. The pleasantness of an uniform temperature and the great saving in attendance upon fires, are also important requisites. In the latter item alone I have saved enough to repay me the price of the stove three or four times in the past winter.

Respectfully yours,

W. T. DAVISON.

Magazine of Horticulture for September.

We cordially commend to our readers this valuable publication, edited by C. M. Hovey and published monthly in Boston. We should be very happy to forward names or subscriptions for a work which deserves the patronage of the friends of Gardening, Fruits and Flowers in the country. We extract from this number an interesting and useful article on the currant.

Remarks on the Cultivation of the Currant.

Very few of our garden fruits are so much neglected as the currant. Its cultivation seems to be a matter of no consideration, and when the bushes are once planted, they are left to take their chance, and little attention is bestowed upon them afterwards. Pruning is entirely forgotten, and the plants often become a prey to insects, which soon destroy them. A fruit so generally admired for its good qualities and its many excellent uses, and so universally cultivated that scarcely a garden exists in which it may not be found, should not be so entirely neglected; for, like all other fruits and plants, it is susceptible of improvement, and had the same attention been given to it that has been lavished upon the gooseberry, we doubt not but that new varieties, far exceeding any we now possess, would have been found in our gardens, as common as the new and improved sorts of that fruit.

In France the currant has long attracted attention, not, unfortunately, and more highly esteemed than the gooseberry. But the French horticulturists did not attempt any improvement in the varieties. The Dutch cultivators were the first who seem to have paid particular attention to it; they succeeded in giving a greater value to this fruit by the production of seedlings, and it is from this source that the very best varieties at present known have been spread over Europe and America.

The late Thomas Andrew Knight, Esq., President of the London Horticultural Society, called the attention of cultivators to the currant, and he attempted the production of new varieties from seed. The currant, he thought, might eventually become a very sweet fruit.

It is well known that the accidental circumstances of soil, situation, &c., in which the currant has been grown, have been the means of so altering the appearance and character of the fruit, that new names have been given to such as have been found in a superior state of growth, and some of the sorts are known and sold as half a dozen synonymous terms. We have known only those who have cultivated the currant many years, who upon seeing this sort of superlative growth, have inquired the name of the variety, under the impression that they might add a larger and better sort to their garden; yet how surprised have they been to learn that it was one and the same kind of which they had abundance already, only in a smaller and neglected state of growth. It is indeed a rare circumstance to find plants in any thing like the vigor they can be made to attain by proper cultivation, the neglect of manure, and above all, the proper mode of pruning.

Within a few years some attempts have been made to produce new seedlings, and we find in the English journals of the present year, two or three new varieties offered for sale. Among our own cultivators, very few have thought of bestowing so much care on this fruit; yet there are instances where it has been done, and with good success. Captain Lovett, of Blythe, presented some very beautiful fruit at a late meeting of the Massachusetts Horticultural Society, which would not suffer in comparison with the celebrated Red Dutch; the clusters of fruit were large, and the berries of great size and fine color; continued experiments, however, are requisite to arrive at important results, and effect double improvement; by continually selecting the largest fruit, and producing successive generations, in a few years the whole character of the fruit would undoubtedly be much changed. In the gooseberry, fruit, from a small, sour, and almost unpalatable fruit, has been increased to three times its original size, its flavor and sweetness improved, why give not the currant, by the same attention, the equally beneficial, and rendered more worthy of extensive cultivation? We hope our amateur horticulturists, among whom are many who delight in the production of improved fruits, will not omit to give the currant a portion of their attention.

But it is to the cultivation of the well known and excellent varieties of the currant which we already possess that we wish to call the attention of cultivators. If their mode of treatment be properly understood, it may be applied to any improved varieties, which may hereafter take the place of those that are

now known. To give this in full, we shall commence with the Production of Seedlings, and add all the other particulars of their growth under the following heads:—Situation, Soil, Raising Young Plants, Planting Out, Pruning, (both summer and winter,) Insects, and General Observations, concluding with Description of the Different Varieties.

Raising the Currant from Seed.—To grow seedlings, it is important that the largest and best fruit should be selected. To do this, a strong and healthy plant should be selected, and if too full of fruit to permit its attaining a good size, it should be thinned out, leaving only sufficient for the plant to bring to the utmost perfection; as soon as the fruit is ripe, it should be picked, and the seeds washed out from the pulp; this may be easily done by bruising the seeds in water, and passing the whole through a sieve, and afterwards spreading it out in a cool, shady situation to dry, after which it may be placed in papers until the time of planting in the month of April. At that season a small piece of ground should be selected for the purpose, and be made fine by deep spading and raking the surface; the seed may then be planted in drills about a foot apart, scattering it thinly that the plants may not come up so crowded as to require thinning out by any extent. No other care is requisite than to keep the land clear of weeds; they will produce fruit in the second or third year, when such as are worth preserving should be marked, and the remainder rooted up and thrown away.

Situation.—The currant is perfectly hardy, and will grow in any situation, whether exposed or not; but it produces the largest and best fruit in a sheltered garden, not exposed to high winds. In warm and sunny borders, the fruit is ripe earlier, and is somewhat green, then when growing in partially shady situations; against a north wall, the fruit will hang on the bushes until the middle or latter part of September. Even within the shade of trees we have found very fine fruit; but we would not select such a spot to raise the best. Besides a few bushes set out for the express purpose of having fine fruit, the currant may be distinguished in any part of the garden where a bush will fill up a vacant spot; they may also be trained against fences, in which situations they bear good crops.

Soil.—The currant will grow in almost any good garden soil; but that in which they produce the best fruit is the greatest perfection is deep, rich, mellow loam, somewhat moist; very stiff clayey soils are the least adapted to it. In sandy soils the fruit is earlier, but the crop is small, and soon gone. When it is the object to produce a very superior fruit, the soil should be soaked out, and then covered with three or four inches of good old decomposed manure. It should then be trenched eighteen or twenty inches deep, placing the top soil and the manure at the bottom of the trench. When the bed is settled, a little manure may be dug into the surface, and it will then be ready for planting.

Raising Young Plants.—Cultivators who wish to make large plantations, and are desirous of raising their own plants, can easily do so. The cuttings should be planted out in April, just as the buds begin to push, selecting a shady border, and planting them five or six inches apart; the cuttings should be about a foot long, of the preceding year's wood, healthy and vigorous, and cut off directly below a joint. If the bushes are to be grown in a manner of small ones, with one main stem, all the eyes should be cut out but the two top ones. Planted out in this manner, they make pretty plants, which may be removed to the fruiting bed the following year.

Planting Out.—The period for planting out is any time after the fall of the leaf in autumn until severe frost, and early in spring before the buds have passed to far as to show their river buds. In dry situations, October is probably the favorable season as can be selected, as the plants start into leaf very early in the spring, often before the cultivator thinks it time to plant out, and a season is lost; but if the ground is inclined to be wet in winter, the early part of April is the best season. The modes of planting are various, some preferring to place them on the borders of walks, and others in belts by themselves; we think the best plan is to place the trees in rows, to set apart a wide piece of ground for their exclusive growth; but whatever situation is chosen, prepare the soils as above directed. The proper distance at which plants should be planted, is six feet apart between the rows, and four feet from plant to plant; less distances than these will do, but the chances of producing large fruit will be less. To plant neatly, a line should be stretched across the bed; at the proper distances put down a small stake, then commence taking out the earth; now place in the plant, setting

against the line; spread out the roots carefully, and cover them with fine earth, making it firm around the roots, and treading it lightly when finished; give each plant a pot of water, if dry weather at the time of planting. Keep the surface of the soil loose, and clear from weeds, by occasional hoeings during the summer.

Pruning.—Nest to a good rich soil, pruning is the most important thing to be attended to; neglect in this respect will be sure to cause disappointment to the cultivator who expects large and fine fruit. The branches will shoot up thick and weakly, and if not attended to, and the superfluous ones cut out, the bush will be so crowded as to produce only a quantity of half formed clusters, with a few small berries.

It is known to many cultivators, though perhaps not to all, that the currant bears its fruit both upon the young wood of last year's growth, upon that of the second and third year, and also upon the little spurs which spring from the older shoots; but it is only upon the young and vigorous wood of the preceding year that fruit of superior size and quality is obtained. Knowing this fact, the cultivator may proceed with his pruning, which may be done at two seasons, both winter and summer, viz:—

Winter Pruning.—The first object should be, after the plant is set out, to see that it is pruned as to form a handsome head; and, first, we may premise that it is the intention to prune them in the best method, that is, with single stems, like trees in miniature, from which the branches fork out at the distance of a foot or more from the ground; this will prevent the continual growth of suckers, which not only injure the fruit, springing up as they do the whole season, but destroy the beauty and regularity of a whole plantation. Winter pruning may be performed late in the autumn, or early in the spring; as the currant is extremely brittle shoots, some think it best to prune in the fall, and by this shortening the branches, to bring the danger of the heavy snows breaking them down.

Commenced by cutting clean out all the cross shoots, leaving only those which spring up regularly. The strongest branches of the old wood should be shortened to six or eight inches, and the weaker ones to very short spurs; the new wood made during the summer should be also shortened to four or five buds or joints. The principle ever to be kept in mind is, to have the head of the bush supplied in all parts with a good proportion of new wood every season; and this can only be done by cutting away the older branches after they have borne one or two crops, and encouraging the growth of young shoots from their base; at no time should the head of the bush be allowed to extend more than three feet in diameter, and three feet high.

Summer Pruning.—This consists only in looking over the plants, after the fruit is well formed, and nipping off new shoots which are growing up where they are not wanted another year; by so doing, an abundance of or will be admitted to the centre of the bush, without which the fruit would be inferior. Some cultivators recommend shortening the bearing branches to within a few eyes of the fruit, as soon as it turns color, but of the advantage to be derived from this practice we have some doubt. If any suckers spring from the root, they should be cut off clean to the stem.

Insects.—The currant has few enemies in the insect tribe; the most injurious is the borer, (*Agria tipuliformis*), which enters up to the centre of the stems, causing great debility, and eventually nearly destroying the plants, or at least incapacitating them from producing any thing but very small and poor fruit; the bushes are also in danger of being injured by light winds or with heavy crops of fruit. The best preventive for this insect is to keep the plants in a vigorous state, and well supplied with strong young wood, as it is only in the older branches that the borer commences its ravages. When they once take possession of the bushes, cut out all the old shoots, especially such as are in any way decayed, and encourage only strong new wood; the aphides, or plant lice, occasionally infest the leaves, but these may be easily destroyed by one or two washings of weak soap.

General Observations.—The French cultivators recommend the transplanting of new plantations every five years, in proportion that, unless this is attended to, the fruit will be small. We have no doubt that the fruit would be somewhat improved by such new plantations, but still, if the old bushes are judiciously pruned, the soil kept well manured and tilled, the fruit will be little necessary of planting out so often.

The fruit generally begins to ripen about the middle of July, and continues in perfection until the middle of August, and in some shady situations as late as

October. If the bushes are exposed to birds, they may be protected by covering them with nets or gauze.

We close this article with descriptions of the most esteemed varieties that are at present cultivated, following the arrangement in the London Horticultural Society's Catalogue. The Red Dutch, White Dutch, and Black Naples may be recommended for small gardens, where there is but little space.

DESCRIPTIONS OF THE DIFFERENT VARIETIES.

§ I. RED CURRENT.

1. *Common Red*.—Fruit medium size, clusters rather small, good flavored, and tolerable bearers.

2. *Red Dutch*.—*Synonymus*: Large Red Dutch, New Red Dutch, Large Red, Large-bunch Red, Long-branched Red, Morgan's Red, and Red Grape.—Cluster long, berries large, growth of the plant strong and upright; Exceedingly productive, and one of the very best sorts.

3. *Knight's Sweet Red*.—Said to be a very fine kind.

4. *Knight's Early Red*.—Rather early; clusters and berries medium size; color deep red; flavor rich and good. We fruited this variety the present year.

5. *Knight's Large Late Red*.—With very large berries, of a deep red color; superior kind.

6. *Champagne*.—Berries of a very pale red; clusters medium size; this fruit is rather acid, but makes a very good vinegar for the table, from its delicate color and transparent appearance of the berries.

§ II. WHITE CURRENT.

7. *Common White*.—The old kind of our gardens; clusters and berries medium size.

8. *White Dutch*.—*Synonymus*: New White Dutch, Jewes' White, Morgan's White, White Christal, White Leghorn; Pearl White.—This is the finest of the white currents; the clusters are very long, and the berries very large. The wood grows upright and strong; exceedingly productive and fine.

§ III. BLACK CURRENT.

9. *Black Naples*.—Also called the New Black; the fruit is very large, often two inches in circumference; clusters large, and abundantly produced; flavor good. This is the best of the black fruited ones. Leaves smooth.

10. *Common Black English*.—This is a very good variety, with large berries; it makes a fine jelly, which is highly esteemed for its medicinal qualities.

11. *American Black*.—Similar to the last, but is not quite so productive.

Knowledge is Power.

In a late admirable report by Horner Mann, Esq., Secretary of the Board of Education of Massachusetts, the following striking exemplification is introduced of the maxim that "knowledge is power."

"M. Redelet, in his work, '*Sur l'Art de Btir*,' gives the following account of an experiment made to test the different amounts of force which, under different circumstances, were necessary to move a block of squared granite weighing 1,080 lbs.

"In order to move this block along the floor of a roughly chiselled quarry, it required a force equal to 753 lbs.

"To draw the same stone over a floor of planks, it required a force equal to 652 lbs.

"Placed on a platform of wood, the requisite force was reduced to 183 lbs.

"Placed on rollers of three inches in diameter, and a force equal to 34 lbs. was sufficient

"Substituting a wooden floor at the floor, and the requisite force was 28 lbs.

"With the same rollers on a wooden platform, it required a force equal to 22 lbs. only.

"At this point," says Mr. Mann, "the experiments of M. Redelet stopped. But, by improvements since effected, in the invention and use of locomotives on railroads, attraction or draft of eight pounds is sufficient to move a ton of 2,240 lbs.; so that a force of less than four pounds would now be sufficient to move the granite block of 1,080 lbs., that is, one hundred and eighty-eight times less than was required in the first instance. When, therefore, mere animal or muscular force was used to move the body, it required about two thirds of its own weight to accomplish the object; but, by adding the contrivances of mind to the strength of muscle, the force necessary to move it is reduced more than one hundred and eighty-eight times. Here, then, is a partnership, in which mind contributes one hundred and eighty-eight shares of the stock to one share contributed by muscle; or while brute strength represents one man, ingenuity or intelligence represents one hundred and eighty-eight men.—*Nat. Int.*

The following statement makes a part of the Lecture of James Smith of Danston, on Subsoil Ploughing and Draining. It may surprise many of our farmers to learn the expenses of cultivation in Great Britain; and we think it will not surprise them less to see the results of such cultivation. The extraordinary profits of the New Husbandry compared with the old system are astonishing; and exhibit the beneficial and liberal compensations of science, skill, judicious expenditure and well directed labor. They should serve to electricity some of our farmers, who are satisfied with a crop of twenty bushels of wheat and forty of Indian Corn, and other crops on the same scale.—*Ed.*

I have received from a landed proprietor and practical farmer in Avonshire, the following statement of the results which have attended the practice of thorough draining and subsoil ploughing, according to this system:—

IMPROVED MODERN HUSBANDRY COMPARED WITH THE OLD SYSTEM.

The following important facts have been communicated to the Directors of the General Agricultural Association by a very experienced practical agriculturist:—

I.—OLD SYSTEM.

Statement showing the expense of cultivation of, together with the return from, an acre (Scotch) of cold, stiff soil, with a hard retentive subsoil, before improvement by draining, &c.; lease for 18 years; rent, 25s per acre.

60 bulls lime, at 10s. per boll.....	£2 10 0
Cutting and spreading.....	1 10 0
Fosterer—ploughing, seed, and harrowing.....	1 18 0
Second do.....	1 15 0
Grass seeds and harrowing.....	0 10 0
Rent for six years, at 25s.....	7 10 0
	£15 13 0

Return of a Six Year's Rotation.

1st—5 quarters oats (with straw).....	£6 0 0
2d—5 do.....	6 0 0
3d—85 stones hay, at 3s. per 100 stones.....	2 11 0
4th—Pasture, at 20s.....	1 0 0
5th—Ditto.....	1 0 0
6th—Ditto.....	1 0 0
	£17 11 0

The same repeated till the end of the lease, the land getting worse instead of improving.

II.—NEW SYSTEM.

Statement showing the expense of improvement, cultivation, and return from an acre of the same land, during a lease of 18 years; rent the same.

Expense of the first Six Years.

Draining with tiles at 15 ft. interval, 25 in deep; tiles 21s. per thousand.....	£7 0 0
Lime, cutting and spreading.....	4 0 0
Ploughing, harrowing and seed.....	1 18 0
Second crop—ploughing, harrowing, and seed.....	1 16 0
	£14 14 0

Expense of Green Crop, viz.

Sub-soil and other ploughings.....	£4 0 0
Grubbing, horse hoeing, and weeding.....	1 10 0
Dang, 10s; lime, 12s.....	11 5 0
Ploughing for wheat and seed.....	2 6 0
Grass seeds, harrowing and rolling.....	1 5 0
Rent for six years, at 25s.....	7 10 0
Interest on expense for draining for five years, at 5 per cent. per annum.....	1 15 0
	£44 5 0

Return of the first Six Years.

1st—8 quarters oats (with straw).....	£10 0 0
2d—8 do.....	10 0 0
3d—Potatoes 3; turnips, 3, at per acre.....	11 0 0
4th—4 quarters wheat, at 60s.....	12 0 0
5th—150 stones hay, at 3s.; faggots 5s.....	4 15 0
6th—Pasture, at per acre.....	2 0 0
	£49 15 0

Expense of the second Six Years.

1st—Ploughing, harrowing, and seed.....	£ 3 12 0
2nd—do do.....	1 10 0
3rd—Green crop, without subsoil ploughing.....	13 0 0

4th—Ploughing for wheat and seed.....	2 4 0
5th—Grass seeds, harrowing, and rolling.....	1 5 0
Rent for six years, at 25.....	7 10 0
Interest on draining, six years.....	2 2 0
	£28 3 0

Return for the second Six Years

1st—9 quarters oats (with straw).....	£11 5 0
2nd—9 do.....	11 5 0
3rd—Green crop—at least.....	12 0 0
4th—5 quarters wheat, at 60s.....	15 0 0
5th—200 stones hay, at 3s.; faggots, 5s.....	6 5 0
6th—Pasture, at per acre.....	2 0 0
	£57 15 0

The expense and return of the third six years will be much the same as that of the second.

ABSTRACT.

1.—Unimproved Lands.

Expense during a lease of 18 years.....	£46 19 0
Return do.....	52 13 0

Profit per acre during the whole lease.....£ 5 14 0

II.—Improved Land.

Expense of the first six years.....	41 5 0
do second do.....	28 3 0
do third do.....	28 3 0
	£139 11 0

Return of the first six years.....	49 15 0
do second do.....	57 15 0
do third do.....	57 15 0
	£165 5 0

Profit per acre during the whole lease.....£ 64 14 0

The above system of cropping is not one to be generally recommended: it is merely adopted because generally followed. If the four or five course rotation were adopted, the profit per acre during the lease would be considerably above the sum mentioned.

Inquiries in reference to Daniels' Manure, and likewise Gypsum—addressed to the Royal Agricultural Society.

Mr. T. Smith, Secretary of the Board of Agriculture of Nova Scotia observes in reference to Daniel's manure.

"It is the new Patent Manure composed of pulverized wood saturated with bituminous matter, united with soda and lime, of more value than the lime and soda used without the other articles? Soda is certainly a powerful manure, but too expensive. We have in Nova Scotia large tracts in which the soil contains so much iron vitriol, (that is green copper)—rust of iron united to oil of vitriol, chemically termed sulphuric acid) that lime in such quantities as are commonly used, has no sensible effect; but on such soils, oyster shells, coral, gravel, or old plaster, have a permanent good effect, owing probably to the quantity of carbonic acid gas which is disengaged from the calcareous or chalky substances by the action upon them of the vitriol or sulphuric acid which is constantly forming from the decaying pyrites, or sulphuret of iron in the subjacent rock. Wood ashes, even after "leaching" by the soap boilers, make a permanent and powerful manure: they contain here a large quantity of sulphate of potash. It is observable, that at a great distance from the sea, ashes are of less value, while gypsum, which has no effect near the sea, is on many crops very useful in inland situations. It may also be observed, that very high winds here sometimes throw showers of salt water over the land, to the distance of twenty or five and twenty miles from the sea, the water being sometimes much saltier than the sea water when it falls. As the line that marks the situation where gypsum commences to be useful, is near that which limits these salt showers, may it not be that the salt prevents the gypsum from operating?"

THE THAMES TUNNEL.—The whole of the tunnel, nearly 1,200 feet in length, is now completed, and will be opened in a very short time as a public thoroughfare for foot passengers; the workmen are busily engaged in erecting the staircase on the Wapping side, which is all that remains to complete this extraordinary work. The machinery, steam engines, and surplus materials are advertised to be sold by auction, by Messrs. Pullen, including the powerful apparatus called "the shield," by means of which the work was accomplished. It is said to contain 150 tons of iron, and to have cost £10,000.

THE NEW GENESEE FARMER

AND GARDENER'S JOURNAL

B. BATERHAM, Proprietor. } VOL. 3. ROCHESTER, DECEMBER, 1842. NO. 12. } HENRY COLMAN, Editor.

IMPORTANT ANNOUNCEMENT!

the Farmers, the Subscribers and Friends to the New Genesee Farmer.

The world is full of changes, and in the language the old play: "we know what we are, but we do not know what we shall be." The proprietorship of this paper has now passed into the hands of C. F. Berman of the Rochester Seed Store, well known for his punctuality, uprightness, and interest in agricultural improvements, to this community, and of E. Shepard, an experienced and respectable publisher in this city, of established character. The reasons for this change will be given below, and the subscriber has a strong confidence that its good character will be fully maintained, and his hopes are as strong that its usefulness will be extended.

It will be seen from an advertisement in another part of this sheet, that he contemplates a Tour in Europe for the purpose of looking at the agriculture of the agricultural institutions and schools of the world, to ascertain what is worthy to be translated to the New. The practicability of the project was not ascertained until since the last number of the N. G. Farmer was issued. It is now determined, evidence permitting, that the subscriber leaves for Europe in the ensuing spring. It is expected, under the present arrangements, that Mr. Colman will continue to edit it for the first third of the year; and re-appear afterwards a regular contributor to its columns the close of this volume; and that when it passes into his supervision, whether it be sooner or later, it will be edited by such as are perfectly competent to make the paper all that its best friends can desire it should be. No part of that which will go into his agricultural Tour will appear in this paper, for this would be unjust to his subscribers; but there will be many other valuable topics of conversation and inquiry in which he promises himself the pleasure of setting them; as to keep the chain of friendship tight and unbroken.

He strongly hopes that their patronage will be heartily continued; and that every subscriber will exert himself to procure others, so that the list, as ought to be, may be doubled.

The price will be one dollar. It cannot be afforded for less, and remunerate or save from loss those who edit and publish it. Where twenty copies are taken, the year's subscription will not exceed twenty-five cents. What is this compared with the equivalent in useful instruction to be obtained from it? This is not two cents a week for ten pages of closely printed matter per month, but, if it were published in the common form, a good duodecimo volume. Let us look at other illustrations of the case, for when any object to paying a dollar or seventy cents for the Paper, we cannot think that they look at the matter in a fair light. A sheaf of wheat ordinarily pays for the year's subscription. Is this anything compared with the intrinsic value of a paper, which may in many cases, improve your cultivation by hundreds of dollars? Fur-

ther, I have within the last year been often struck with one fact. In going into a public house or hotel in most parts of the country, we are charged half a dollar for a single meal, breakfast, dinner or supper, and the same for lodging; so that whenever I took a meal at any such place, I was compelled to say to myself as soon as I opened my mouth, down goes one subscriber for the N. G. Farmer; and if my business or convenience required me to stay two or three days, why then I eat them by dozens, like a hungry man making a meal of small fish, or of ground sparrows or snowbirds. I was often led to reflect, does a whole year's paper come to no more than this? Look again at the case—I cannot go into my office or traverse the streets of this gaudy city without being fumigated with tobacco smoke. And without meeting continually with people who, I think, ought to be indicted under the statute as public nuisances, who go about smoking themselves and smacking others with odious segars. I dare say this may be very pleasant to them and is deemed a precious luxury; I do not wish to detract from the happiness of any man, but how infinitely higher are all pleasures connected with the mind, than this low, sensual and selfish gratification; yet the saving only of one segar a week, think of it, would give them the New Genesee Farmer a whole year even at its increased price; and more than this. Now, I have often said to myself, can it be that this is all that is asked for such a boon? Then again if really pulling is so delicious a pleasure, why let them honestly leave off smoking and become subscribers to the Farmer; and we will promise to give them such a puffing in our columns as shall do them good all the days of their lives, and be redolent with the most precious odors which taste and skill can compound; odors as different from those with which they compliment their unoffending neighbors, as the perfumes of Eden are superior to the sulphuretted hydrogen of a pig sty.

I might give other illustrations. One year's product of a good Hive of bees, which demands little more trouble than that of taking out the honey, will in many cases pay at once five years subscription to the Farmer, and this intellectual hive we promise to store with honey gathered from the flowers of every clime, as nutritious to the mind as it is delicious to the taste. Pardon me if I say further, that there is not a farmer in the country, though as poor as the whole live stock amounts only to a single pair of barn yard fowls, who demand nothing for their support but chaff and worms and grasshoppers, who will not find these humble friends, if he will only allow them to go to housekeeping and rear their family in a sober and regular way, like all respectable people, ready in all probability, to pay more than two years' subscription for the paper in a single season. What shall we think then of a farmer, who, under such circumstances, will presume to say that he is too poor to take this paper? So a single sheep, mutton headed as this amiable class of beings are, and never suspected of being the patrons of literature, excepting

as their skins may be converted into parchments for writing, or leather for the covering of books, may at once become a subscriber to this new paper; and in her wool or her lamb, will be ready to honor at sight the printer's draft.

NOW THEN IN REPLY TO A RESPECTED CORRESPONDENT AT WHEATLAND, WE HAVE POINTED OUT SIX DIFFERENT WAYS OF PAYING FOR THE N. G. FARMER.

FIRST, by one bushel of wheat taken out of your five hundred, to be charged to the account of seed sown, from which you are to reap fifty fold.

SECOND, by saving two meals at a public house in the course of the year; in which case a good deal more is often saved than the cost of the meals.

THIRD, by limiting yourself to nineteen segars instead of twenty in the course of the week, by which means likewise, there would be something saved to your health, to your good manners, to your neighbor's comfort; and to your country's reputation, if Mr. Box should come this way again. O! the Dickens, you'll say.

FOURTH, by raising a hive of Bees, whose twenty or forty pounds of honey and a swarm to sell, may pay several years subscription, besides the beautiful example of industry, which these little folks will exhibit to the other little folks of the family; and the pattern of a well ordered community, so instructive to yourself as the citizen of a republic.

FIFTH, by the suitable encouragement of one Mr. Cockerel and his spouse, who, enjoying your protection but demanding nothing from your purse, will jointly produce eggs and chickens enough in the season to make the editor crow as loud as ever one Chapman (we think that is the name, though we are no politicians) ever crowed in a log-cabin campaign.

SIXTHLY, by setting aside one sheep in your flock of hundreds, who is to be considered in the family as the patron of agricultural literature; and consequently to be treated with all the respect and kindness due to so useful a personage.

We might point out one hundred other ways on the farm in which the paper may be paid for without a consciousness of its expense; and with a hundred per cent. profit in the exertion: for there is scarcely a child five years old, in a farmer's well ordered family, who may not pay for the Farmer with a week's knitting, and with all advantage to their own education.

The publishers of the N. G. Farmer engage to present it with the commencement of the New Year, in a new and handsome dress. They promise in its preparation the best services which they can procure. The pleasure and profit which it will bring to the farmer's family and children they believe will be worth fifty times its cost. On public as well as private grounds, they hope the farmers will encourage it. The press is the most powerful engine, which can present or human ingenuity can devise, for the advancement of any good cause. What farmer, then, deserving a place in that most honorable class, will withhold his aid on any occasion from the advancement of agriculture, a cause among the most innocent and the most useful, the very foundation of human subsistence, the spring of some of the purest pleasures which the heart can take in, the guardian and promoter of good morals, the great instrument of civilization and the pioneer of religion.

HENRY COLMAN

Rochester, Dec. 14th, 1842.

Silk Culture.

The following communication we acknowledge with pleasure. Men are always willing to boast of their success, but few men are brave enough to tell of their mistakes and failures, which are often more useful and important to be known than their successful results.

In some respects we cannot agree with Mr. Cook. A prepared, finished and furnished cocoonery, well adapted to ventilation and warming at pleasure, is undoubtedly to be preferred; but within our knowledge good silk and an abundant product have been obtained in feeding in vacant barns and granaries. We recommend a well built cocoonery, believing that the cultivator will be in the end fully compensated for the expense and outlay; but at the same time we would not have poor and small cultivators prevented or discouraged in their operations, because they have not the means of at once erecting a well finished cocoonery. In Mansfield, Ct., where silk has been successfully raised for seventy years, such provision is scarcely known. That the time of feeding may by the best arrangements be reduced from six weeks to little more than three weeks is a very material consideration to recommend the best fixtures; and as by the improved French method, attention day and night, in order to the most rapid completion of the work. The disease, to which Mr. Cook refers, is a formidable obstacle in the culture of silk. We cannot say from his account of it, that it is the disease known in Europe as the *muscadine* and which it has been said confidently, may be cured by a sprinkling of caustic lime upon the worms; but we know that a friend of ours, whose worms were diseased this season and died in great numbers, applied lime as directed without any perceptible benefit. We need much more information than we have in the case before we can pronounce on the character of, or the remedy for the disease. That the worm may be injured by feeding from the leaves of the mullein of one year's growth is not improbable, as we have heard from a very intelligent silk grower the same opinion strongly expressed.

In respect to the destruction of the *Chrysalis* we would recommend Miss Rapp's method of stifling them in a box with camphor; though we know those, who do it by steam in preference to all other modes without the inconvenience or ill effects which Mr. Cook describes. They are careful however in the case not to allow the current of steam to be poured directly upon the cocoons; but the cocoons receive it as it becomes gradually diffused through the box or vessel in which they are placed.

With respect to the insect, which Mr. Cook describes as perforating the cocoons and materially injuring their value, we know at present of no certain preventive. This is a not a frequent accident. An excellent silk grower of long experience however advises that when the cocoons are put away Scotch snuff or tobacco should be put among them, as is done among woolen cloths in summer, to keep off the insects. This he thinks would prove an effectual security. It is a curious fact that there seems to be no animal, except the human, filthy enough to relish or rather not to be absolutely offended with this detestable weed; and which in the vile habits of chewing and smoking with their peculiar accompaniments renders its devotees in most cases a perfect nuisance to decent people.

We fully agree with Mr. Cook in the opinion that the silk culture can never succeed without pains-taking and care and labor. Nothing good in life can ever be accomplished without these; and with these the silk culture is almost sure to return an ample compensation for all the labor and expense incurred.—Ed.

PERRY FARM, SOLUS F. O. }
October 14, 1842. }

HENRY COLMAN, Dear Sir:—Your letter, asking an account of my operations and success in the culture of silk, was received several weeks since. A multiplicity of engagements, both at home and abroad, must be my apology for the delay in answering it.

I have been experimenting in a "small way" in the culture of silk, about five or six years, preparatory to larger operations, which I hope to make next year; and the value of this communication, (if worth anything,) must depend upon the profits of experience in mistakes, errors, bad management, and misfortune, more than upon the history of any very splendid or successful results. I have not made in any one season more than about five bushels of cocoons; and the present, only enough to supply seed for another year, as I have been finishing off and plastering my cocoonery.

First, then, as to mistakes and errors I presume I was not alone in believing a great deal that has been written and said with regard to the ease of raising worms in barns, open sheds, &c. Of the falsity of this, at least in this climate, with our changeable weather, cold nights, north-east storms, I have become thoroughly convinced. To ensure a reasonable degree of success a cocoonery ought to be finished off, and plastered to keep off rats, mice and other vermin; to be furnished with a stove to warm the room in stormy days and cold nights, and conveniences for ventilating in warm, cold weather. For the want of artificial heat, the worms will be from 1 to 2 weeks longer in going through their several changes. Mine have lingered along forty or fifty days, while others in the neighborhood with the advantage of a close room and artificial heat, have wound up in thirty-two days; and this summer I had many of my millers carried off in the night by rats, bats or something else, before they had deposited their eggs. The worms if fully supplied, will eat almost incessantly with the exception of the moulting periods, from the time of hatching until they are ready to wind up, unless they are interrupted by a temperature so low as to benumb and stupify them. The time of this interruption, I believe, must be added to their existence in the form of the worm, and that too whether the interruption is caused by cold weather or want of food. This reasoning I think will account for the fact, that worms thus treated, rise so irregularly; some are more vigorous and healthy than others, and consequently better able to withstand the effects of the cold; they therefore do not lose so much time.

I lost more than two thirds of my crop this summer by a disease which appeared among the worms after the last moulting, and just as they were beginning to rise. On the appearance of the disease they ceased to eat, became stupid, and gradually assumed a bright yellow color. In the last stages of the disease, they would burst with the slightest touch, and emit a yellow liquid and a very offensive odor. I thought the further spreading of the disease was finally checked after it had carried off thousands, by carefully picking out all that showed any signs of the disease in their appearance, and throwing them away. I attributed the disease to the want of artificial heat in the cocoonery, and to feeding the worms with the tender succulent and young leaves of the mullein, after the last moulting. I have been told by one who professed to know, that in this age, the worms should be fed only on the old and tough leaves; if this is the case, it will not do, as I have been accustomed, to cut the branches, and strew them entire upon the feeding shelves. Again, I find that the worms do better to be fed regularly and at least six or eight times in 24 hours.

It seems to me that it is to be desired that easier and better way of stifling the chrysalis should be devised than I have yet known of. I have been baking, exposure to the direct rays of the sun, direct steaming; the first I think hardens the and makes them more difficult to reel, besides danger of burning the cocoon. The second is in all cases effectual; and by the last process I had cocoons damaged or entirely ruined by the corrosion of the steam on the lid of the steam-box, thence dripping on the cocoons. The steam softens the cocoons so much that they are liable bruised and injured in spreading them out to dry, intend the next season to try the vapor of alcohol spirits of turpentine.

Even after we have succeeded in raising the worm and stifling the cocoon, there is another enemy, the bug or worm, which attacks the cocoons they have been put away out of the reach of mice rats.

A few days since I took down a bag containing bushels of floated cocoons, which had been for some time hanging up to the rafters, as I supposed, in order and in perfect safety. Upon examination of them were found to be punctured with a round hole about as large as a coarse knitting needle consequently, instead of realizing the full price floated cocoons, (\$1.00 per bushel,) I was obliged to sell them for \$2.00.

But after all this long story about failures and takes, I am by no means discouraged. I believe these difficulties may be surmounted by perseverance and greater attention, and it seems to me the great fault with writers on this subject has been that they have labored to make the community believe, that silk could be successfully made by the slipshod and careless manner which obtains in a majority of the farming operations of the day; but not so. The business, to be profitable, must be attended to, and "whatever is worth doing at all is worth doing well."

One of my neighbors, (L. L. Coleman,) has had a good crop of silk this summer, and without any accident. He showed me a few days since, as pounds of new silk of his own raising and reel which appeared to be of the first quality.

Yours, with much respect,

W. D. COOK

P. S. I cannot close this communication without requesting you to sound the note of alarm to the readers of the Farmer relative to the black canker plum trees. In a recent trip through a part of Way Cayuga, and Oneida counties, I was astonished by the great extent and fatal character of the disease. From South Butler, in Wayne county, to Syracuse in Oneida county, I did not see a single plum tree which appeared to be perfectly healthy, whereas hundreds that were entirely dead. What is the cause?

W. D. C.

Yates County Fair and Show.

The following intelligence, which we extract from a Penn Yan paper, affords gratifying evidence the right spirit is at work in that quarter.

"The 20th of October was an auspicious day Yates county. The meeting at Penn Yan on that day was a gathering of her true nobility, viz: hard-fisted, intelligent farmers and mechanics. Such a meeting has a moral in it—it is a kind of piety which indicates the tone of feeling and interest with the farmers of the country have in their own pursuit. Judging thus of the meeting on the 20th, we can infer that the farmers of Yates county are beginning to feel and appreciate the nature and importance agricultural improvement and advancement. It was the second fair ever held in the county, and it is one every way worthy and creditable to the agriculturists of the county. The improvement in stock and

last year was appreciated by all. The large number of fine blooded calves, colts, pigs, &c., on the ground, was conclusive evidence of the improvements which are going on, and which promise much for the future. But to the Fair.

Two days were pleasant—cold, cloudy, but no rain. Early in the day, people began to make their way to Penn Yan, on every road might be seen the farmers with the stock seeking in the true spirit of emulation, the place of exhibition; here a cow and calf, there a noble Durham bull, beside as a lamb and lead by the hand of a boy; and then again the quiet, innocent looking Saxony and Merino ewes, and the fine coated and prouder looking bucks; and with the lowing of the herds and the bleating of the docks, was the less melodious voice of the grunter tribe, the Berkshire, &c. of our farmers. On they came, presenting a singular appearance, the commingling of man and beast, each dressed and fitted for a gala day.

At eleven o'clock, the various yards, now full, and to the looker-on from the steps of the Court House, the scene was animating and full of interest; there, in that morning sun, were the producers, the hard-working, wealth-creating men of Yates county. Now came the various committees, and leaving them to their examinations, we will enter the Court House, and see what is there worthy of notice; and here comes the handy-work of women, to cheer and enliven the scene—the substantial uniting with the luxuries of life. Fruits and flowers, vegetable and plants, the products of the dairy and the spinning wheel and loom—here a splendid specimen of grain carpeting, with its many colors beautifully arranged—and there the substantial and tasty coverlet, bespeaking a timely preparation for the cold of winter; and then, as a climax to the whole, the beautifully ornamented lawn rug, and the unsurpassed workmanship of the ottoman and sand rugs, with their finely wrought pictures and representations, such as none but the taste and industry of woman could produce—and with these their handy craft, was woman herself, the best and bravest of all. Now, where shall we go?

Let us down for a time, for you perceive there is a rush for the Court House; the hour has come for the meeting of the society, to hear the address, reports, &c. The house is now crowded and jammed full—the President is in his seat, and the voice of the strong man has charmed the vast audience into silence and attention. Well, the address is finished, and was it not a good one—full of just sentences—of deep and well digested thought—of sound and wholesome advice, and of elevated and commanding eloquence? and take it all in all, style, manner and sentiment, it was the best, among all the good things, that we ever heard from Francis Adams. But we must hurry on—

The Monroe County Reports.

Mr. Colman having been necessarily absent during most of the past month, was unable to copy his Address for publication as soon as was expected. The pamphlet containing the address and transactions of the Society is now in preparation and will be ready for distribution very soon. The following are extracts from the Reports.

Report on Ploughing.

The committee on ploughing respectfully report,—that the number of competitors on the ground was greater than they have ever before seen—seventeen having entered the field and several were disappointed on account of the whole ground that was fit being occupied. The show of teams, ploughs and plough-eyes, was highly creditable to Monroe county, and would have done honor to the oldest and richest county in the state. But to speak of the work, the committee feel themselves unable to render that praise which the competitors justly deserve; the whole 17 having performed their work, as we think, to the entire satisfaction of the most fastidious and particular person that can be produced. The committee perambulated the ground for nearly two hours, before they could even satisfy themselves where the preference should be given, and it is perhaps a mere lottery decision as we have decided; so nearly perfect were a large number of the lands ploughed.

The committee came to the conclusion to prefer the work where the furrow slice was most perfectly

turned without any reference being had to the straightness and uniformity of the furrows; believing that the perfect ploughs leave the furrow on edge, and ordinary ploughs leave it half turned over and resting on its fellow. The committee are aware that a diversity of opinion exists on this subject, and they may be in error, but if so, it is not from any interested motive. They think the most perfect plough is the one that most perfectly inverts the furrow and buries every particle of the grass, particularly for fall ploughing and spring crops. The opposite opinion may with consistency be maintained for the ordinary summer following.

The committee therefore report the following persons entitled to the Societies premiums.

The first premium to George Sheffer, with the "Premium Plough," held and driven by John Sell. Quarter of an acre ploughed in 42 minutes.

The second premium to Donald McNaughton, with the "Caledonia Plough," held and driven by Robt. Patton.

The third premium to Charles Burr, with the "Cayuga County Plough," held and driven by O. Parker.

The fourth premium to John H. Robinson, with the "Livingston County Plough," held and driven by himself.

To Robert H. Brown of Greece, the first premium for the best work done by oxen, ploughed by Joseph Brown, with the "Wisconsin Plough."

The committee dare not trust themselves to particularize, or bestow that; raise that is due to others to whom they have not awarded premiums; as it would embrace every individual on the field; but they cannot omit to mention with great satisfaction, the work done by the Howard, Monroe County, Livingston County, Genesee County, Locklin and Scotch Ploughs, and the individuals who handled them. It is particularly gratifying to the committee, to notice the great attention and improvement in that part of the manipulations of agriculture which must be considered the base upon which the whole superstructure rests; and it speaks well for the county which has been selected as the Banner County, where is to be held the great State Fair for 1843.

All of which is respectfully submitted by the committee.

L. B. LANGWORTHY,
C. F. CROSMAN,
FRANKLIN CATE.

Extracts from the Report of the Committee on non-enumerated articles.

ATWATER'S STEAM GENERATOR.

Stephen Atwater of Rochester, exhibited an ingenious Portable Steam Generator, a new invention of his own, that promises to be of great service to Farmers. With 6 lbs. of dry hard wood it will cause a barrel of water to boil in 20 minutes. Its cost is only \$15. We award the inventor a premium of \$6.

NEW HAT KNIFE, &c.

Messrs Barton & Smith of this city, exhibited a very choice collection of Cutlery and Farming Implements, among which was a new kind of Hay Knife of their own invention, which the committee believe to be a great improvement, and they recommended it to the examination of all who have use for such an article. The committee award each of the gentlemen a bound volume of the Transactions of the N. Y. State Agricultural Society.

OIL AND CANDLES FROM LARD.

The committee would close their report by calling the attention of the members of the Society to the lard oil and stearine candles, specimens of which were exhibited from a manufactory at Cleveland, O. These two articles must hereafter attract much attention throughout the whole country. The lard oil is already

a great demand for machinery and manufactory, and has been used in several of the light houses on the lakes, and is said to burn clearer and longer than any other, while the cost is only about one half that of sperm. It has lately been discovered that oil, equal to sperm, can be extracted from lard to great advantage. After extracting the oil, the stearine remains and forms a substance similar in every respect to spermaceti, and the candles from this can be afforded for from twenty five to thirty cents per pound. These articles are already becoming quite common in the state of Ohio, where large establishments are engaged in manufacturing them, and where the nature and utility of these substances are generally understood, it will readily be seen that it must have a most important bearing upon agricultural profits.

ALEX. KELSEY,
W. C. CORNELL,
N. HAYWARD.

Rust on Wheat Straw.

It is stated in a communication on page 147 of our last number, that cattle thrive much better on rusted than on bright straw. The writer suggests that the rust affords positive nourishment; but is it not for more probable that its superiority is caused by the unthreshed grain, which, from the difficulty of shelling out, the rusted straw contains?

It is also suggested there, as well as frequently elsewhere, that a strong and sudden flow of sap hurts the straw. Would it not be simpler as well as more philosophical to suppose, that the external tissue cracks open merely from the action of outward moisture, as ripe fruits often do in rains,—instead of by an explosion? The opinion that rust is dried sap, is, I believe, satisfactorily disproved by the fact, that the microscope shows it to be a real fungus, a parasitical plant, with its several parts as distinct as those of a mushroom. And that this plant spreads by the seed, thus rendering the disease contagious, is proved by the facts stated in the communication of J. B. Bowen in the last volume of the Farmer. J.

From the Mark Lane Express.

Cheap Food for Horses.

A proposition has been made to the French Minister of War, by a M. Longchamp, to try a new method of feeding horses, which he asserts will produce a vast saving in the amount of forage necessary for the army. This gentleman proposes to make a sort of bread, three-fourths potatoes, and the rest oatmeal, with which the horses are to be fed in place of oats. The average quantity of oats for a horse per day, M. Longchamp estimates to be 10 lbs., costing about 13 sous. He proposes to replace this food by 10 lb. of the bread made with oats and potatoes, the price of which will be only 5 sous, leaving a saving of 8 sous a day. As there are 20,000 horses in the army, a saving would arise on the whole of the cavalry of 11,680,000 fr. a year. M. Longchamp considers this food to be more nutritious than the food generally given to horses, for a great portion of the oats taken by a horse are imperfectly masticated, and therefore the nutritive qualities are allowed to remain latent. Heat and moisture, he declares, are necessary to bring forth fully the qualities of the fecula of oats, and this can be procured most effectually by subjecting it to the heat of an oven, after having been moistened and well mixed up. Cakes of this kind have been long used in Holland with profit; and M. Longchamp expresses his surprise that potato-flour has not been more commonly and openly mixed with bread; bakers, he says, being in the habit of using it. But this is not the only advantage to be gained by this proposition. A hectare of oats (2½ acres) is worth about 19 fr., whilst one of potatoes produces 240 fr. M. Longchamp thinks that, if one third of the land at present under cultivation for oats were planted with potatoes, five times a greater quantity of cattle could be bred in France. By this means butchers' meat would become cheaper, and be within the reach of the generality of the inhabitants of the kingdom. The more generous diet thus procured would have a considerable influence, M. Longchamp declares, on the average height of the natives of France, which the recruitment of the army proves to be each year decreasing in stature.

For the New Genesee Farmer.

Translations from the German.

GRAPE VINE CUTTINGS.

M. Frischer, the superintendent of the gardens of the Duke of Weimar, employs with success, the following method of propagating the more choice varieties of wine and table grapes, by means of cuttings. He selects from among the stalks and branches cut away in fall and spring pruning, such as are of suitable diameter—say from $\frac{1}{2}$ to $\frac{3}{4}$ inch.—and have well ripened wood. These he cuts in pieces midway between the buds, and splits each piece lengthwise, preserving the bud unimpaired. The halves containing the buds are then placed with the flat side on a bed of well prepared garden mould, gently pressed down level with the surface, and covered with moss, or a layer of fine leaf mould. Thus planted, the cuttings speedily strike root, if the bed be kept moist by occasional waterings, and properly shaded, without obstructing the circulation of the air.

Cuttings similarly prepared, though not split, readily strike root and produce vigorous plants, if their ends be dipped in melted sealing wax, and they be planted in good garden soil, covering them in to the depth of half an inch. The ground must be kept moist, and free from weeds.

GRAFTING.

M. Schroer recommends using a branch of common willow, an inch or two in diameter, in the following manner, as a matrix for receiving the grafts of such varieties of apple, pear or quince trees, as it is desirable to multiply. Make longitudinal cuts or slits through the branch, at equal distances of 15 or 18 inches. Take grafts having two perfect buds, give the lower end the usual wedge-shape, using a keen knife, and insert them in the slits of the willow, making the lower bud sit close to the slit. Then bury the branch in a trench formed in good garden soil of such depth as will permit the upper buds to protrude just above the surface of the ground, when the trench is again filled. The ground must be watered occasionally if the season be dry, and weeds must be carefully extirpated whenever they appear. In the spring of the following year, the branch may be taken up and cut in pieces, leaving a small portion to each of the growing grafts—which are to be replanted in a nursery. The willow does not form a permanent union with the grafts; but merely supplies nutriment till the proper fibrous roots are produced from the lower bud.

POTATOES.

M. Bellamy Aubert, of France, states, as the result of experiments continued during three seasons, that abundant crops of potatoes may be grown in poor clayey soils, by simply sowing the sets plentifully with rye-chaff previous to covering them with earth at planting.

Professor VOLKER, of Erfurt, covers his potatoe sets with a layer of tanners' spent bark, two or three inches thick, before turning a furrow over them. He says he thus provides a loose spongy bed for the young tubers; prevents weeds from springing up and growing in immediate contact with the plants; and secures an abundant supply of moisture during the season, if but one soaking rain occur after planting—as the spent bark, covered by the surface soil, will retain water during the most protracted drought.

FRUIT TREES.

Dr. Zimmerman, of Zinzow, alleges that the natural productiveness of fruit trees is injuriously affected by the practice of training standard trees high, or pruning off the lower side branches. This training is usually commenced in the nursery, and continued even after the tree is transplanted to its permanent position in the orchard—resulting in giving the tree a

main stem 6 or 7 feet high. Dr. Zimmerman contends that trees of the same class or variety, thus trained, are never so productive as those which are suffered to assume a more natural form and development; and he refers, in proof of his theory, to the fact that orchards belonging to persons who know little of the modern scientific refinements in horticulture and whose trees are very scantily pruned, are invariably more productive than those whose owners keep them in regular subjection to the knife. Permitting trees to branch out lower, would perhaps involve a greater waste of ground, in orchards especially; but the increased productiveness of such trees, would, in the Doctor's opinion, abundantly compensate for this. There are moreover many plants which could be advantageously cultivated in the shade of such trees.

The truth probably, in this case also, lies between the two extremes—and possibly the whole matter may resolve itself into this, that the more horizontally the branches of fruit trees are trained or permitted to grow—which appears to be Nature's tendency—the more productive of fruit will the trees be. In training fruit trees against walls, it is known to be advantageous to give the limbs a descending curve. This effect will be naturally produced, if the trees be permitted to branch out nearer the surface of the ground than is customary. The limbs, in this case, assume a nearly horizontal direction, and are subsequently curved down by their own weight and that of the fruit they produce, and the result of the whole is, a greater tendency to the formation of fruit buds.

MADDER.

The proprietors of small farms in the Grand Duchy of Baden, cultivate madder, of late years, with much success and profit. The plant requires a rich soil, free from weeds, and the root yields a beautiful and durable red color only when it is permitted to attain to perfect maturity in the soil—which is not till the close of the third year of its growth. Roots of one year's growth are indeed used in Avignon, but the dye prepared from them is not durable; and that from two year old roots is very little better. Good madder, yielding a rich and durable dye, can be prepared only from roots not less than three years old; and if two of the summers were very hot, the dye will be the brighter and more permanent. When it appears that the summers are unusually cool, the roots are not taken up till the close of the fourth season. Southern plants, acclimated and cultivated in northern latitudes, require great care and judgment in their treatment, to prevent deterioration; and the madder plant does not appear to be an exception.

FROZEN POTATOES.

The results of repeated experiments show that potatoes injured by frost are not rendered valueless; but that very good flour or meal may be prepared from them, if the weather continue sufficiently cold to permit of repeated thawing and freezing. By this process, properly conducted and continued, the watery particles are expelled, and the inner of vegetable substance is gradually converted into meal. Exposure to rain and snow is injurious only as prolonging the operation. The meal or flour thus formed, can be readily separated from the outer skin or peel. M. ENSMOFF exposed soft watery potatoes to the action of frost in this manner, and obtained a very superior flour, which was preserved in good condition for two years, even in a damp cellar. When it happens, in consequence of the unusual severity of the season, that large quantities of potatoes are injured by frost, excellent and nourishing meal may by this process be prepared therefrom, with very little expense or trouble.

Travellers relate that, in the native country of the potatoe—the more elevated and colder regions of Peru

—the inhabitants expose quantities of this vegetable to the action of frost, for a similar purpose. After repeated alternations of freezing and thawing, the whole mass is thrown into a kind of vat and well kneaded or trodden wth their feet to separate the skins or peels. It is then put into coarse bags, and placed in a stream of clear running water, where it is left three or four days. When taken out, it is spread as thin as convenient and dried in the sunshine; and thereafter ground into flour.

Professor PUCK, of Leipzig, in his Archives of German Agriculture, recommends that the same method be employed when apples, pears, or turnips are accidentally injured by frost.

Potatoes are neither so productive, nor of so good quality, in warm as in cold climates. In Spain and the south of Italy, the vines are thicker and longer, and the foliage more dense and luxuriant than in the more northern countries of Europe where this vegetable is cultivated; but the tubers are smaller in size and fewer in number. In Colombia, large potatoes and abundant crops are produced only in the more elevated mountain regions—rising from 8000 to 10,000 feet above the level of the equatorial seas. The same appears to be the case in the United States—the potatoes of Maine greatly excelling those of the middle or southern state in quality and flavor, and the average crops are much more abundant.

ITALIAN RYE-GRASS.

In the Grand Duchy of Mecklenburg, the Italian Rye grass (*Lolium perenne italicum peristatum*.) is found to be far superior to, and much more productive than, the English Rye-grass. Early in March it presents a rich, green, and vigorous appearance. The stalks and leaves are soft and juicy, and it is fit to be cut for hay early in June. The second crop produces a large quantity of seed, if cut early in September; and the after growth yields plentiful and succulent pasturage. The seed is smaller than that of the English Rye-grass; and when produced from the second crop, is generally very clear and pure. The Italian Rye-grass would probably be valuable for forage, in northern districts, as it is sufficiently hardy to stand the winter. For soiling cattle it is found to be particularly valuable.

HORSE CHESTNUT HEDGE.

Wenzel Hamneck, of Morevia, recommends the Horse Chestnut, (*Aesculus hippocastanum*) as best adapted for forming a hedge impervious to men or animals. The seeds, when gathered, are spread out in a dry and airy chamber for a few weeks. They are then planted in a shallow trench formed by a hoe or a plough, dropping them four or five inches apart in the row, and covered with earth. The young plants will appear about the close of the ensuing April, and should be kept well weeded. In the spring of the third year, before the sap begins to flow, the stems are bent across each other so as to form a kind of wickerwork, and bound firmly together at the crossings by means of willow twigs, or bies. If this be well done, the trees unite permanently at those points, forming a lasting and impenetrable fence. By proper care in the subsequent pruning of the hedge, denseness can be greatly promoted, and a neat and handsome appearance imparted to it.

On Animal Manures.

(Translated from the German.)

The bones of different species of animals differ much as to their component parts, and therefore are not of the same value. As far as nitrogen is concerned, the bones of cattle are the best, whilst those of horses and sheep are preferable on account of the greater amount of phosphate. Those who use bones as manure should bear that in mind.

As far as the use of bones for manure is concerned, it is requisite that they should be previously reduced

into the finest possible dust, which, however, is a difficult operation, on account of the toughness of their cartilage. The operation is performed by pounding or grinding, sifting the dust, and pounding and grinding the coarse pieces again. Fine pulverisation is absolutely necessary, in order that the cartilage may be the sooner dissolved in water, and the phosphoric lime in the acids of the soil. The coarser the dust the more it will take to manure a certain area; the finer, the less; however, the coarse powder will not last for a longer period. Of fine bone dust, 700 lbs. or 800 lbs. will suffice for the Magdeburg acre; of coarse, 1200 lbs. to 1500 lbs., especially if an immediate effect is expected. Heavy clayey soils will require more than light loam or sandy fields; and if bones are to be used efficiently upon dry sandy soil or in humus, the bone dust must be first mixed with umous earth, and be left to rot, as we shall state hereafter. Bone-dust always acts best if brought into close contact with the roots, and should therefore either be harrowed in with the seed, or used as a top-dressing. In England, it is drilled in the ridges, where the farmer sows. 700 lbs. of bone dust will even last three years, as I have found by several experiments; the first year, however, the action will be the most if the season has not been too dry. It has been assumed, that 200 lbs. of bone-dust are equivalent in their action to 500 lbs. of dry manure, which, however, is a very uncertain calculation, for the quality of the manure must be taken into account.

If bone-dust is not properly, it is necessary that soil should not be deficient in humus and moisture; because both cartilage and phosphate of lime are substances with difficulty dissolved in water; the latter especially being only soluble in water by the aid of humic or carbonic acids derived from humus. Moisture is also indispensable, because it is necessary to bring about the change of cartilage to ammonia and carbonic acid. Humic acid is of equal importance, for the sake of neutralising the ammonia generated from the cartilage and fixing it. If then manuring with bone dust has been occasionally found to be unsuccessful, it may have been caused by the deficiency of humus or moisture. To be certain, then, that bone-dust will produce the desired effect in a dry soil devoid of humus, it is always best to mix it with umous earth and to throw them into a hole. This mixture being kept wet will become rotten, much umous of ammonia will be formed, and it may then be used as a top-dressing, or be harrowed in with the seed. Bone-dust will become equally efficient if previously put into a urine-tank and permitted to decay. The phosphate of lime will thus be decomposed by carbonate of ammonia that arises from urine, the salt of which will be the generation of phosphate of ammonia and carbonate of lime. The former salt is very soluble in water, and will therefore—even if there be but little humic acid in the soil—easily provide plants with the necessary amount of phosphorus, as well as nitrogen. Experiments which I have made with the phosphate of ammonia have shown that it is very beneficial to plants. It has been also recommended, when bones have been merely crushed, to mix them with quicklime in a ditch, and to let them rot there; but this process is bad. The consequence is, that the whole of the ammonia developed on the cartilage will escape as gas. Equally objectionable is the plan of packing bone-dust in heaps before using it, wetting it, and letting it rot in that state; because, in this instance also, the ammonia will assume the form of gas. If, on the contrary, as shown above, umous earth is mixed with the bone dust, and ammonia will be fixed by humic acid. If the soil contains much fat, a sort of ammoniacal soap, easily soluble in water, will be produced. Those vegetables will be most advanced by manuring with one dust in which much nitrogen, phosphorus, and chlorine are to be met with, to which class belong all sorts of cabbages and turnips, wheat, trefoil, beans, peas, and vetches. Used on meadows, bone-dust brings up different species of trefoil and vetches, and the same time generates a rich herbage, much relished by cattle. It has been objected to bone manure, that it brings to the land worms and insects which destroy the crops; but this will not be the case if the bone dust has been previously mixed with humus earth, and is thoroughly rotted; because, in that case, the cartilage, which attracts the worms and insects is decomposed. To lighten a clayey soil by coarsely used bones, as some have suggested, is, at the high price of bones, quite out of the question on account of the expense.—*Farmers' Journal, Eng.*

Good Reason.—A secretary of state being asked by an intimate friend why he did not promote merit, replied, "Because merit did not promote merit."

Ridge versus Flat Drill.

To the Editor of the *Doncaster Gazette*:

Having heard various discussions on the relative merits of ridging and flat drilling white turnips, I resolved this year to bring the matter to the proof, by trying the experiment in two or three fields. I tried in one instance flat drilling on land which had laid a fortnight against ridging and drilling on fresh mould; the flat 16 inches apart, the drilled or ridged 27 inches apart. They were both carefully hoed and singed; but the flats yellowed very early and stopped growing; whilst the ridged luxuriated in their ample space, and grew to an uncommon size; the difference in the weight of crop per acre is to the amount of some tons. Adjoining these I ploughed down manure, and drilled on the flat, but they scarcely did better than the other, though they had all the same top dressing; whilst the ridged ones, immediately contiguous, with the same quantity of manure, did exceedingly well. A few further observations I made on these experiments may not be without interest; we took a few loads of dung, or rather litter, fresh from the fold, the exact soil that modern science so greatly approves, but the turnips rejected the new fashioned views, and grew both easily and tardily; indeed the difference was astonishing between this and Christmas-led and once-turned manure. In the same field some were not rolled, some done with a wooden roller, and some with a heavy stone one, across. The effect on the turnips was slight, but on the weeds important; for, just according to the weight of the roller, had the weeds been repressed in their growth.

Should these observations be worthy a place in the *Gazette*, you will, by their insertion, greatly oblige yours, &c.

AN 1 LONIAN.

P. S.—I venture an assumption for the purpose of eliciting remarks from some of your numerous readers, that fold manure requires more vegetative qualities during the process of fermentation than it loses by the escape of ammonia.

From the *Albany Cultivator*.

Water Lime—Cisterns.

Charles Merrivether, of Graysville, Ky., requests some "information as to the burning water or hydraulic lime, the best sand to mix with it, and the mode of making cisterns."

Hydraulic lime is burned in the usual manner, but as it will not take like common lime, it is ground to fit it for use. Hydraulic lime varies so much in quality, that no general rule can be given as to the quantity of sand it will bear in making cement.—When good, the 4 bushels of sand to one of lime, will be the proper quantity, although some use more sand. The sand should be sharp and clean. There should be no clay or loam among it; since if these be present, the cement will not have the requisite hardness, or set quickly. The best method of making cisterns, is to dig the excavations of the proper size and depth; then make over the bottom a firm floor of stone, or brick laid in cement. (A single flat stone like those used for paving, that will make an entire bottom, is the best,) and on this foundation build the wall of stone or brick for the reservoir. Whatever may be the material of the wall, it should receive one or two coats of cement on the inside, to insure its being water-tight. Some, in making cisterns, place the cement on the earth of the pit, using neither stone or bricks. Where the ground is very dry, and the sides can be made smooth, this method, where two or more coats of cement are used, may answer; but in general, the best way is to construct a wall as above directed. The cistern when made must be covered so as to be secure against frost. In making the cement, it must not be wet up, or prepared, faster than it is wanted for use, as lying for any considerable time spoils it.

We recognise below the hand of an old friend, whose authority is unquestionable.

From the *New England Farmer*.

Seeding on Green-sward Furrows.

MR. PUTNAM.—In your paper of the 31st of August, there is an inquiry, in what part of the State the experiment has been made of seeding on green-sward furrows, and how the farmers liked the practice. We are disposed to give "Essex" information concerning our experience and practice, without participating at all in the dispute whether this be old or new husbandry.

Some twenty or twenty-five years since, the writer was told that Mr. Z. Estlin, of Hanover, produced ploughing award bound fields, manuring and seeding with grass, without any intervening crop. The first

suggestion of such a course was sufficient inducement to make an experiment, as much fruitless labor and expense had been given in attempts to raise grain crops on cold and clayey soils. Every experiment made has been attended with very satisfactory results. There is no loss of crop in the course, and yet most of the purposes of naked fallow are fully accomplished. The gradual dissolving of the soil prevents the soil from falling into too compact a state, (a common evil on low lands) and imparts nourishment for many years to the new grass. We have a field which was ploughed and seeded in August, 1825; it has not been very frequently or copiously dressed with manure, and is still in better condition than mowing fields generally. Another field, seeded twelve years ago, and dressed once in two years, produced this year a very large first crop and a second is now ready for mowing.—This practice is worthy of all commendation on land not suited to grain crops. Where Indian corn would be likely to grow well, we should think it a more economical and better course to plow in the spring, supply manure, plant with corn, cultivate with a level surface, and sow grass.

"Essex" seems disposed to blame farmers for neglect in communicating to the public, if the system concerning which he inquires, has been pursued "for a long course of years." Remissness in communication is no doubt an easily besetting sin, and the writer will not deny that it sometimes lies at his door; but on this subject there is no conscientiousness of any improper reserve on his part; all suitable occasions have been embraced to direct the attention of farmers to a practice so intimately connected with their interests and prosperity. All practicable publicity has been given to views entertained on the subject. In an account of the cultivation of the writer's farm, which was published in the *N. E. Farmer*, vol. 2, page 360, this practice was mentioned as part of the system pursued. In the county of Plymouth, the practice has not been extended proportionate to its utility; but we have the satisfaction of seeing a good number of farmers every year adopting it, and where one experiment has been fairly made on a farm, an intelligent owner will be very certain to repeat it.

M. ALLEN.

Fenbrook, Sept. 2d, 1842.

Fair County Agricultural Society.

The second fair this season, of this Society, was held at Buffalo, Nov. 16th, for the exhibition of grain and root crops. The following are the awards of the viewing committee:

ROOTS.

Best one quarter acre carrots, 1512 bushels to the acre, Manning Case, Black Rock, \$3.

Second best one quarter acre of carrots, 1040 bushels to the acre, Abner Bryant, Black Rock—Diploma.

Best one quarter acre ruta bags, 1000 bushels to the acre, Abner Bryant, Black Rock, \$3.

Best one quarter acre beets, 1280 bushels to the acre, Abner Bryant, Black Rock, \$2.

JOHN WEBSTER,
JOHN CARPENTER, } Committee.
DAVID P. WHITE,

GRAINS.

Best acre corn, 57 bushels to the acre, Thomas C. Love, Newstead, \$4.

Best acre barley, 42 bushels to the acre, John Carpenter, Wales, \$3.

Best acre oats, 67 bushels to the acre, John Webster, Hamburg, \$3.

DISCRETIONARY PREMIUM.

To Manning Case, Black Rock, one-half acre corn, 51 bushels to the acre—Diploma.

A. CALLENDER,
A. BRYANT, } Committee.
WM. HODGE, Jr.,

The attendance was very small, owing probably to the bad state of the roads. There was no application for the premiums on wheat, rye, buckwheat, peas, beans or potatoes. And on the articles to which premiums have been awarded, there was no competition. The samples exhibited, however, were superior.

WARREN BRYANT, Sec'y.

The late Thunder Storm.—A curious incident occurred in a crowd: the finger of an individual suddenly became light, and was conducted with electrical velocity into another person's pocket, when being attracted by the metal, it struck upon the whole of it, and then glided off, so that the bolt which usually follows was quite in another direction.—*Punch.*

Mediterranean Wheat.

MR. COLMAN—Practical farmers have been so often imposed upon by humbugs, in the shape of new articles of agricultural produce brought to their notice through the columns of agricultural papers, that they have formed a distrust, and justly too, of all such communications, especially when they find at the bottom, the very disinterested offer of "only a small quantity" for sale at the moderate rate of four times the market price of the same article. And I will take the liberty to add, that the publication of such communications, and particularly when upon trial they prove to be sheer impositions, tends greatly to lessen the character and influence—yes, and the circulation and perusal of agricultural periodicals, and forms one of the chief arguments brought up against what is called "look farming."

I am led to these remarks by reading in your truly welcome Genesee Farmer for September, the article headed "Mediterranean Wheat," from the Hon. H. L. Ellsworth, the very worthy Commissioner of Patents at Washington City.

As one humble individual practically engaged in farming, I have much admired the indefatigable exertions of that gentleman to promote the agricultural interests of our country, and I doubt not, I shall be joined by the mass of farmers throughout the Union, while I most heartily tender him my thanks therefor. I hope and trust that his great zeal and devotedness in the cause, may not get the better of his judgment, and lead him into errors or statements, the publication of which he may at some future time regret.

The new variety of wheat which is now brought to the notice of the wheat growers of Western New York, is recommended as being "proof against the fly and almost proof against rust." Mr. Smith gives us no reason why the fly does not attack the Mediterranean Wheat,—indeed he says frankly, that no explanation can be given,—but he knows it is so and that is enough. I regret this, for I should be pleased to see how he would set himself to work to account for it.

Now, sir, such an argument, or rather, such a statement, has no weight with me, and I doubt whether many Western New Yorkers will be found willing to pay two or three dollars per bushel for his wheat upon such a recommendation. They know too well, that Mr. Fly is not a discriminating gentleman, but will attack the wheat plant without regard to varieties or high sounding names,—or whether it be "far fetched and dear bought," or the humble production of our own soil. In the other recommendation, its being "almost proof against rust," there is somewhat of plausibility, if this wheat does certainly ripen ten or twelve days earlier than any other variety.

The yielding qualities of this wheat, the most important item with the wheat grower, are stated only by guess-work. Mr. Smith says he has cultivated it after corn and potatoes, and that after the potatoes *he thinks* yielded full 30 bushels per acre,—but does not even guess at the yield after the corn.

If he wishes the farmers of Western New York to purchase his wheat at an exorbitant price, why did he not measure his ground and his crop, and state the exact result? Why did he not state the kind and quality of soil—the course of cultivation—the time of seeding—and the time of harvesting?

J. HORSEFIELD.

Castile, Wyoming Co., N. Y.

In the main, we perfectly accord with our friend Horsefield, but we think we should not let his communication go without some qualification. In respect to editorial responsibility perhaps he demands too much of us. What we publish under our own name or authority, we are entirely responsible for. What we publish, though it may be mere hearsay, in a style of encouragement and in a way to imply that we credit it,

we are to a degree responsible for, at least so far as our character for good judgment is concerned. But what we publish under another man's name, he and not we are wholly answerable for. Mr. Smith and Mr. Powell are responsible for the statements to which their names are attached. We confess ourselves incredulous in regard to the peculiar properties of the wheat recommended, because, first, the statement seems improbable; next, because no reason, it is admitted, can be given why this wheat should not be as subject to the fly and the rust as other; and third, because we do not know personally either of the gentlemen mentioned and the offer to supply the seed, (though not our friend suggests, at an exorbitant price.) would lead to the inference that some self-interest was at the bottom of it. But we do not think the inference is a very strong one. What it is every farmer can judge for himself; and a very small quantity of the wheat for trial, say half a bushel, would not be likely to involve a farmer in any ruinous risk. We think it clearly worth the trial. As to Mr. Ellsworth, his disinterestedness in the case is beyond all question; and his zealous efforts for the agricultural improvement of the country, entitles him to universal respect and gratitude.—Ed.

Moral and Intellectual Culture.

Having in my last communication, touched but slightly on what I conceive to be the duties of mothers, I would now invite their attention; incapable though I am, of doing justice to this subject, but the importance attached to it, induces me to endeavor to arouse the slumbering mother, to engage in the cause of intellectual cultivation, and thereby pave the way for all the innocent pleasures and exalted enjoyments the immortal spirit of man was originally designed to delight in and aspire to.

The mother! how much is expressed in that one word. With it is associated all the most tender, refined and lovely feelings of our nature. And who that reflects upon the station she occupies, can doubt that a vast accountability rests upon her. Mothers have you pondered this responsibility! When Heaven placed in your possession that infant form, think you not, no fearful responsibility arose from that relation? To sustain in the situation which you occupy with innocence and a clear conscience, is a subject of infinite importance to yourself, to your family, and to the community. For it you must answer to God, who imposes the duty.

Does the mother that feels her children a burthen, the cares and labors she must endure for their sake as grievous to be borne, does she fulfill the manifold duties Heaven demands of her? No! with these sentiments and feelings, it is impossible. There is no one thing, in my opinion, in which there is so much wrong, so much contrary to what it should be, as the principles and feelings imbibed by mothers toward their children. I have seen many a mother that appeared to feel justified in considering a family of children a curse. And why? Because such mothers do not study into the designs and intentions of the Almighty, in instituting the dear and near relation of the mother to her child. They seem not to discern the wisdom and goodness of God—the unbounded mercies and blessings of Heaven, when mingled with the bitter pangs of bodily anguish and mental suffering. Yet the deep fountain of a mother's love will gush forth in constant anxiety, care and labor, in a sacrifice of almost every ease and comfort for their children. This shows plainly and conclusively, that the mother possesses within her own breast, a faithful monitor, which, if adhered to, would direct her not only to provide for their physical wants, but to labor more earnestly and abundantly for their progress in morals, in religion, in that which serves to enlarge the affections for the good and just, and enlighten the mind with the beams of nature's laws and spiritual wisdom.

In that receptacle of anxious care and self-denial, of affliction and tenderness in a mother's heart, there should also reign high moral principle, self-acquaintance and self-control, and with these a consecration of all else, to the laws and requirements of the gospel.

In a family little can be effected in the cause of mental improvement, unless the parents act in concert. Take a wife that is fretful, worldly and selfish, and you will soon perceive that all the efforts of the husband are rendered abortive. And also, if a wife be ever so intelligent and active, if she has a husband whose soul never breathed one aspiration or desire for any greater good or better knowledge than wealth can bestow, how little can she accomplish. But even then I would say, try. Never despair of good. Perhaps the husband or the wife might be induced to overcome the wrong sentiments they have cherished, if they should behold in their companion an example of steady devotion to the intellectual and moral improvement of their children and family.

I am well aware, that farmers' wives have much to engross their attention in their business; and a great amount of care and labor to endure. But the next question is, are they obliged to subject themselves to such hard duty. The great difficulty is, that mothers allot to themselves far more labor than they ought to undertake. You task yourselves, in my opinion, far beyond your duty; the physical powers to much, the mental too little. It is not uncommon to see a farmer's wife do her kitchen work, washing, ironing, baking, cleaning, &c., the knitting, sewing, spinning and weaving for the family, with the assistance perhaps of a few weeks labor, or some little help. And this, very probably, by one who is abundantly able to afford herself leisure for meditation and reading, for attention to her children; in a word, to intellectual cultivation. But not they do not possess all the world yet, and until they do, she must toil and labor as unceasingly as if her children were starving for a morsel of bread. Is this right? Is it doing justice to yourself and your family? Is it fulfilling your duty to God? Hercules strength could scarcely endure it. The most healthy and robust feel that they are old while yet young, when subjected, year after year, to so much excessive fatigue and labor. And the half of the difficulty lies not here. Its greatest evil exists in the prostration it affects on the intellectual powers, and religious and moral principles of the heart. One of the fundamental principles in the science of phrenology is, that the organs that are most exercised will develop the most largely, and thereby become the moving springs to action, the most likely to control the whole tenor of our lives; while the neglected faculties, or organs, will perish and decrease, until they are scarcely perceptible. Now whether this science is real or imaginative, as some suppose, I will not attempt to discuss. But I do know, from my own experience and observation, that any of the passions, will, by frequent indulgence, become habitual; and what becomes a seated habit cannot be overcome, without a powerful and persevering effort of the mind. And I also know, that if through carelessness or indifference, we neglect to cherish the tender and benevolent sentiments of the heart, we become cold and selfish; our indifference increases until it becomes a seated principle of the mind and a striking characteristic of the person. I have but just broached the subject, and leave it with regret for the present.

FLORA.

A Sign of Better Times.—Mr. Jonathan Wilson, of Shroton, Vt., lately received two hundred dollars of Solomon W. Jewett, Esq., of Weybridge, for a Pauler Mermu Buck.

Herbs for drying or for distilling should be cut before their flowers expand, and the former laid thinly in a shady place.

Pedantry, says Coleridge, consists in the use of words unsuitable to the time, place, and company.

We have already got somewhat involved in the question of Protection to home industry; but we are not willing to refuse our respected friend Garbutt a place in our columns. The question is in every account, a most interesting one to the farming community; but we do not mean to admit its claims to the prejudice of other important matters, and will not permit it to assume a partisan character. For ourselves, we think the root of the whole matter lies much deeper than either of our correspondents have yet reached. The common arguments, pro and con, are quite hacknied, and we wish they would go into deeper waters, or rather look at it from a higher vantage, far above all the smoke and dust of party conflict.—Ed.

The Tariff.—In Reply to S. W.

MR. CONYER.—Your fluent correspondent S. W. is so constantly dabbling with the tariff, and is so courteous towards John Farmer for not thinking as he does, that I am compelled to suspect that he is determined to make the columns of the Farmer subservient to his political views, and is so anxious to confute his antagonist that he sometimes forgets himself.

I will take the freedom to notice a few of his statements in answer to John Farmer. He says—had he (John) been as well informed on the subject of our national tariff as he is refined and witty, he would have known that the high tariffs of 1828 and 1833 did not receive even a majority of the votes of the New England States.* Now if S. W. had not been so anxious to expose John's ignorance, he would not have made such a blunder as to class the tariff of 1833 with that of 1828, as a high protective tariff. So far from that of 1833 being a highly protective tariff, it was an abandonment of the protective system and a repeal of the tariff of 1828. This has been one of the principal causes of paralyzing our industry and bringing the country into its present state of stagnation, depression and embarrassment. It is true, as S. W. states, that the tariff of 1833 did not receive even a majority of the votes of the New England States, for the six states had 20 votes in the House of Representatives, of which there were only ten in favor of the bill, viz: 6 from Maine and 4 from New Hampshire; one from New Hampshire being absent. The remaining 25 voted against the bill. Now if this strong vote of 25 to 10 against the abandonment of the protective system and against the repeal of the tariff, is a proof that the New England States are not in favor of a protective tariff, S. W. has a strong evidence of the fact; but to me it has rather the contrary appearance. In the next paragraph he classes the tariff of 1833 with that of 1816, either to show John's ignorance or his own knowledge. The one was about the commencement of the protective system, the other its abandonment.

Again he says "John Farmer asks 'why are our New England factories closed and their hands unemployed at this time?'" He lets a manufacturer of his own town answer, by stating "that a protective tariff would not help them, for they have the whole of the home market without foreign competition;" but here S. W. has left a hole to creep out at, for the manufacturer who gave the answer, is one of coarse cotton goods; his answer, therefore, is correct, as far as that kind of goods is concerned. But, Mr. S. W., John's question was a general one, and applied to all our branches of manufacturing industry, and you gave the answer as such, which goes to say that our manufacturers are not interfered with by foreign competition.

Again he says "the difference of opinion between John and myself is simply this, I want all our great national interests, agriculture, manufactures and commerce, protected by sound and equal laws, but he seems to embrace the delusive notion that we stimulate the manufacturer by taxing the other interests." Now Mr. S. W. if our manufacturers "have all the home

market with a fair demand for export," how can a protective tariff be a tax on the consumer? Were there a duty, no matter how heavy, laid on imported ware or air, I do not think that it would be much of a tax on us, who do not inhale it.

S. W. is correct when he states that "John Farmer does not know that the manufacturing interests of the United States have been fostered more than any other interest." Nor does any other man, for commerce has received hundreds of dollars as protection where the manufacturer has received one.

Again he says that "so far from specie going out of the country, it never goes out when it is indispensable for a currency at home." If so a poor and needy community will never want money. This is to me rather a new notion; and I should guess that some of our Western States will soon have a plenty of it, for they have been pretty destitute of a currency of any kind for some time. This is a wonderful age for new things and wonderful improvements; it was formerly the notion of its working folks, that a community would be rich just in proportion as they were industrious and economical, and that in proportion as they bought less than they sold, and earned more than they spent, that they would have money plenty, independent of "paper rags," African shells, or any other substitute.

But I would ask S. W., and every honest and candid man, what is the reason that the experience of this country for the past 20 years must be set at naught, and we yet keep prating and writing about protective tariffs and free trade, as if they had never been tested by experience, and as if there was nothing for us to do but to talk and write.

When the "abominable" tariffs of 1822 and 1828 were passed, the country was made to re-echo from one end of the union to the other with their anticipated dreadful effects. Our commerce would be destroyed, our ships rot at the wharves; our laborers would be made dependent beggars; the farmers and merchants would be ruined by the enormous taxes that they would have to pay, to raise up a manufacturing aristocracy. Well, what was the result; those tariffs went into operation, and strange to tell, none of these dire effects followed, but the very reverse occurred in every case. There never was a country more prosperous, nor one where labor and skill were more liberally rewarded than in the United States from 1822 to 1832. Then commerce increased with a double ratio; our cities advanced with rapid strides; laborers of every class found employment and ample compensation; our farmers and merchants were prosperous; and the country advanced rapidly towards wealth and prosperity. Our currency was as sound and as good as it could be; it was not surpassed in the civilized world; a dollar at one part of the Union was a dollar at the other, and by paying the postage of a letter, "our paper rags" could be converted into gold or silver at the pleasure of the holder, and the facilities for exchange were such, that distance was scarcely realized by our merchants. But our wise and knowing ones were not content with this state of things. We must have a change, and with that change we were to have a better currency, and better times for every thing; but we must have a change, and a change we have got. Yet I fear that it will be a very hard matter for even our wise and knowing heads to tell wherein that change has benefited the country since 1832.

Yours, most respectfully,

WILLIAM GARBUTT.

Wheatland, 1812.

For the New Genesee Farmer.

Protective Tariff.—No. 3.

Another reason urged in support of a Protective Tariff is, that it will prevent a consequent drain of our specie. The argument that a prohibition of imports

would permanently increase the amount of specie in this country, in its practical effects, would ultimately destroy all commerce, and in my judgment, it is wholly based upon the false premises that we can sell every thing and buy nothing. I grant that when a nation buys a large amount more than they sell, that the coin must be exported to liquidate the debt, but the next year's purchase of the debtor nation will undoubtedly be enough less than the former, to restore the equilibrium of the commercial world, which can be accomplished in no other way than by a return of the specie to that nation where there is a deficiency and the greatest demand. There it will assuredly find its way, because, like every other article of commerce, it must go where it commands the highest price.

But suppose that we levy an additional duty of 20 per cent. on all articles which we consider the absolute necessities of life, the result would be an increase of price in our market. Cannot the British manufacturer sell to some extent as before at the same profit, by merely paying into our Custom House the additional 20 per cent. tariff, and reimburse himself by being enabled to sell his goods at the advance price? Another reason urged, is that England and other countries will not admit our bread stuffs without paying enormous duties, and that if we were to retaliate, it would of necessity compel them to come to terms of reciprocity. This I believe is the natural feeling of all. It has been the last and most difficult point for me to relinquish, for I was once in favor of a Protective Tariff and a credit currency. I still hold myself open to conviction, and if I can be convinced that my present views are incorrect, I am ready to relinquish them, believing that I am not one of those who if "convinced against his will is of the same opinion still."

If I mistake not, we have tried the retaliating system once, and I would ask what evidence is there, that we shall be more likely to succeed upon a second trial; and is not the tendency of public opinion in the old world altogether in favor of free trade principles; are not all parties in England scheming eagerly to get rid of the system, on account that the mass of the people can no longer sustain life under its oppressive burden?

Do not the starving millions attribute our prosperity to the practice of Free Trade by our Government? Shall we disappoint them by our example and deprive them of every hope? Shall we return to a system of taxation that is the cause of the premature death of 20,000 human beings annually? and that too on our small island of our own kindred blood?

But admit for argument that the retaliating system would bring England to our terms of reciprocity, what would be the effect upon the price of Bread stuffs? would the price here materially advance? would we not then come in competition with wheat from the Baltic, from Russia, Germany, Poland, and all other grain growing countries, and that too where labor is cheaper than with us, and even less than it is in England? How can we then compete with either of those Nations in a foreign market, under any system of high prices?

I take the position that American labor must absolutely come in competition with that of Europe, unless we adopt the Chinese policy, and destroy all commerce and live entirely within ourselves, (a system wholly impracticable to adopt in this enlightened age).

What are we to understand by commerce; is it not an intercourse of trade and an exchange of products or manufactures between the several nations of the Globe? and how can we exchange our products and manufactures for dry stuffs, hides, or West India goods, with Spain, Mexico, or the South American States, without meeting England and all other commercial nations in competition for the same trade? And how can we exchange products with Russia, France or

Germany, but what we meet England there in competition for the same trade.

If we go to Africa, we there find them, or to the "utmost parts of the earth, there are also." If we levy a duty to protect our own manufactures, the prices are raised in our own market, (as I think I have clearly shown) they can then compete with us, and if we prohibit them altogether they will smuggle their goods among us, and if they dare, they would fight us in the bazaar, as they have China, if we debetted them in the act.

I confess that at the first view it appears inconsistent that we should admit the products of England on better terms than they admit ours; but shall we injure ourselves in order to retaliate against them? Shall we, because England oppresses the bulk of her population by excessive taxes on their bread, make the majority of our citizens pay excessive taxes on their manufactured goods? and is it a good and sufficient reason for so doing? I think not. Why is it that England takes the landed interest into such special favor by way of protection? It is because the monied men—the Lords and Nobles have monopolised all the land of the Kingdom, and they frame all the laws to advance their own interest and force their hard earnings from the mass of the people.

The English nation possess much greater natural advantages for manufacturing than for agriculture, on the account of a dense population and their limited territory at home, which is easily monopolized; consequently the mass of the people must necessarily be engaged in manufacturing. The law makers, therefore, in order to carry on their extensive wars and support a splendid government, have made the manufacturer bear the brunt of taxation, on the ground that these individuals, possessing natural advantages for producing wealth, can bear more taxation and sustain life, than individuals who do not possess those advantages.

Monroe, Mich., 1842 J. S. DUTTON.

Protective Tariff.—No. 4.

The Wool Growers, more than any class of farmers, seem to favor the Protective Policy. Do they think that an advance of 10 or 20 per cent. to the present duty on wools, would ensure them for all time to come, the same increased ratio of prices? If they do, they are greatly mistaken. Do the manufacturers go for the same duty on the "raw material?" and if they did, competition at home would soon reduce the price of wool to the old standard, if not below it; and at present prices, I predict that Michigan will, in ten years from this time, turn out a greater surplus than any other state in the union does at present.

Wheat and Wool are to be the great staples of the state; we have done with producing pork, beef and coarse grain, at a loss of 50 or 75 per cent. on first cost, as at present prices.

While on this subject, I would ask what is the cause of the present low prices of these articles, if it is not on account of over-production, or too great a surplus and no foreign market, at a price that will pay us the first cost. Now suppose that the tariff is increased on wools as well as woolen, the prices of wool would be raised, and all the farmers in the Union turn their attention (as they undoubtedly would) to the production of that article, how long would it be before the market would be glutted, (the same as with pork at present)? Would not prices then be brought back again, if perhaps not below the present standard? Would you not then have just cause to call on Government for an additional tariff? more especially as they had stimulated you to invest your whole capital in the production of that article, at high prices, and would they not be bound again to throw around you the mantle of protection, by way of a bounty or otherwise to be again followed by over production, fall of prices, and then an other call for increase of protection?

I have been told that the manufacturers purchase wool in a foreign market say at 21 cents per pound, and then fill it with 2 lbs. of sand to one of wool, or saturate it with some substance which costs nothing and is easily separated or cleaned, until it brings the first cost of the wool down to 8 cents per pound, or below, and then it is to be admitted into our country free of duty. On its arrival here they open the bales and shake out the sand, or cleanse it in some other, and they then have a fine article free of duty, worth 50 cents per pound in our market.

I do not pretend positively to vouch for the truth of the charge, although to me it seems not improbable.

But the cry is, give us high prices or we perish. This I admit is a debatable question, and one that ought to be well understood by the great mass of producers; but to my mind, a system of high prices is unfavorable to the prosperity of this great nation.

I wish to be understood, so here I assert, that a general system of low prices is better for the laborer, the farmer, the mechanic, and manufacturer, (that is, that an absolute specie standard is better than a fictitious paper credit,) and that it is better that improved farms should be worth twenty dollars per acre, and laborers dollars per month, and wheat six or seven shillings per bushel, and manufactured goods and every thing else in proportion; than it is to have all things twice or three times higher, because at the low scale of prices we might export a surplus to foreign countries, and at the higher rates, foreign countries would undersell us.

In short, special legislation of any kind, that has a tendency to raise up prices and establish a fictitious value upon property, whether by a protective tariff as a general policy, or a credit currency or any other monopoly, fraud or fiction, is decidedly injurious to the productive classes, and the best interests of this country. I am satisfied that the tendency of this nation is to purchase all the goods we are able to pay for under any circumstances, and when we imagine ourselves wealthy from either of the above causes, we purchase more goods than we are able to pay for, and instead of getting rich, we become miserably poor by the operation.

The high priced, high tariff advocates will now ask; would you reduce us to the condition of the Russian serf, or the English weaver, and in what is our condition better than theirs, unless we obtain higher prices for labor than they do?

I answer that labor is best paid when it will obtain the greatest amount of the necessities or luxuries of life for a given service performed; that it is the relative and not the nominal prices of labor and necessities that determines when labor receives a just reward; and you cannot reduce the producers of America to the condition of the operatives of Manchester and Birmingham, until our Government under the specious pretence of "protecting our industry," taxes us enormously, by way of a Tariff, on all the imports we eat, drink or wear, and allows a bounty on a portion of our exports to some favored class; taxes us for the glass in our windows, and for every thing under Heaven, and then in addition, takes one tenth of all the products for the support of one established church.

In short, when our Government adopts the whole system of British "protection," of which ours is a faithful copy, all except the "sliding scale," then and not till then, will the producers of America be brought to the same condition of the producers of England, the operatives of Manchester and Birmingham, and then we may perhaps boast of a splendid government and sing America "rules the waves," and dictate to the nations of the earth, with death and starvation staring us in the face to the extent of 20 thousand human beings annually.

J. S. DUTTON.

Monroe, Mich., 1842

AGRICULTURE OF ONTARIO COUNTY.

The present condition of agriculture in this county generally, as well as in this immediate portion of it, may be called good. The soil of Ontario is rich, but in different sections it presents every variety of loamy, clayey, sandy, and the various degrees of admixture of these.

The aspect of the country is agreeably undulating and picturesque. The principal product of the country, since its first settlement, has been wheat. The coarser grains are cultivated, but mostly for domestic consumption.

Wool has become within twenty years, an important product of our farms. The town of Richmond had, at the recent census, about 25,000 sheep, chiefly Merino and Saxon, and these mixed upon the common stock. Some, but not much attention has been paid to the Bakewell, South Down and larger breeds of English sheep. Our sheep husbandry would doubtless be improved by increased attention to root-cultures, beets, running, &c. Our wheat is sold to the merchant millers of the neighborhood, whence the flour is mostly sent, by the way of the Erie canal to New York and Boston. A portion of it, however, finds its way to the Canada market.

Our wool is generally sold at home, to purchasers for the eastern manufacturers.

Of cattle for milkers and beef, the short horned Durham is the favorite breed. For working oxen, the Devonshire is still the best. Of swine, the Berkshire is, at present, the favorite. Much pork, since the temperance cause has been in the ascendant, has been fattened on apples. For a number of years, I have fed my hogs but about a fortnight on Indian corn, after taking them from the orchard; and have thus made excellent and profitable pork. Good horses are raised in this county; but the present race are an admixture of almost all varieties of breeds.

The different kinds of hickories, black walnut, butternut, elms, maples and beech are the prevalent timber of this neighborhood.

The value of farms may be said to range from \$35 to \$50 the acre, according to the situation, quality of soil, buildings, &c. &c. Occasionally, farms are sold at higher prices.

Clover, timothy and redtop, are the grasses most cultivated and most profitable for pastures and meadows.

To the question—"what agricultural changes are requisite to advance the prosperity of the country?" it may be answered, the extended introduction of the silk culture would probably be one of these changes.

Our farmers are industrious, enterprising and tractable; ready to adopt, and give fair trial to any improvement in the science of agriculture, to test new implements and machinery, and need nothing to advance their prosperity, but wholesome and steady laws of protection to American industry.

[Trans. N. Y. State Ag. Soc.

Rust in Wheat.

We extract the following from the American Farmer of recent date. It certainly deserves attention, and we commend it to the consideration of intelligent and observing persons. The advice in regard to early cutting is to be received with some caution. We approve of early cutting, but in one case we know that we cut too early; and therefore feel that this danger is to be guarded against. We remarked on the error committed by many farmers in this matter in our last number.—Ed.

Hence, then, we infer, that *pestilence*, or over-fellness in the supply of any, arising either out of the peculiarly favorable condition of the atmosphere, whose phenomena we have described, or an over rich soil is the cause of the disease, and in this we are borne out by two eminent agriculturists, whose essays we have

already published, but shall not extract a sentence or two from each, by way of strengthening our position.

Wm. M. Peyton, Esq., after enumerating several assigned causes, says:

"But if on the contrary, it results from *Plithora*, induced by excessive vegetation, then I am fearful it can only be lost remedy."

"That the last is the true character of the disease I am convinced, though I express the opinion with some diffidence, as I know it is opposed to the views of many agricultural writers of distinguished reputation."

"I have heretofore supposed that the exudation proceeded from the bursting of the minute surface vessels, whose rupture not being visible to the naked eye, had discredited the theory which taught the existence of what could not be seen. But in a conversation a few days since with a sensible and observing farmer of a neighboring county, he told me that the ruptures were distinctly visible, when the rust was removed with pointed tools. On the same day he illustrated the correctness of his statement by producing several stalks of rusted wheat, upon which longitudinal ruptures were very distinct under every blotch of rust examined."

C. G. Green, Esq., the President of the New Jersey Agricultural Society, in his late report, gives the following cases, tending to the same point as the one given above:

"One of our farmers had an extraordinary piece of wheat, which he thought out of danger, it was so nearly ripe. On a very hot day, between the hours of one and three o'clock, there came a small cloud over, which completely drenched the field of wheat. A deadlike stillness succeeded; the cloud passed away; the sun shone extensively hot. The owner in this state of the case, went to examine the wheat, as it was much pressed down by the shower; he immediately observed a continual ticking, or snapping noise in every direction in the field. The straw was fine and bright, but upon examination he perceived it bursting in short slits of a fourth of an inch long, and the sap exuding in thousands of places. A day or two after, the whole field was darkened with rust and the wheat of little value. It does not appear that these circumstances take place while the wheat is growing, but only at the critical state of ripening."

On my neighbor White's farm some years since, was one of the heaviest pieces of wheat straw I ever saw, remarkably fine, and nearly ripe. I had also a good piece advancing fast to maturity; on a clear morning, a small cloud of fog arose from the meadow and gradually covered the two fields, but was not a general fog; being very still, it remained hovering over the fields until the hot sun dissipated the vapor. Being acquainted with the above case, I was alarmed for the wheat and watched over it with deep interest. When the sun had somewhat dried the straw, and warmed it, the straw began to burst with a continual ticking noise, the sap exuding at all these little splits. In a day or two the fields were black with rust except some small spots, which are worthy of notice. An acre or two of mine was so nearly ripe that the wheat was tolerably good, and the rust on the spots of a reddish brown. In Mr. White's field there were some trees which kept the intense heat of the sun from the straw; there was tolerable wheat, also. The rest of the fields would scarcely pay for gathering and thrashing."

A question of importance arose in these two cases. Was this injury a fungus, the very fine seeds of which float about and attach themselves to the straw, as some of our learned agricultural writers tell us, or is it the sap of the straw that ran out and was dried on the straw, and was reddish or black according to its state of ripeness or fulness of sap?

Your committee are decidedly of the opinion that the sap being lost at this critical time of ripening is the true cause of the shrinking of the grain."

It must, we think, strike the reader very obviously, that this rust is not occasioned by parasitical plants, or fungus; that if the discolored matter on the external surface of the wheat plants, be or present the appearance of, parasitical plants, that it is produced by the rupture of the overcharged vessels of the plants, and is in fact oxidized sap which had thus escaped and formed a species of paste or jelly on the outside. We do not pretend to deny that in the interval between the exudation and the drying of the sap, that living fungus bodies had not taken up their abode therein, for such is one of the consequences of putrefaction—it is sufficient for us, to endeavor to show that the bursting of the vessels of the wheat plant, is the cause of the rust.

It may now be asked, are there any preventive

measures to be used? We answer that we do not know any—and among them these:

1. *Deep ploughing.* By this, the roots will be permitted to extend themselves so deep as to be without the immediate range of sudden atmospheric action—all fermentable manure, applied to previous crops, will also be deposited too deep to do harm from similar causes.

2. Application of saline manures, as lime, marl, plaster, salt, &c., and the avoidance of all use of any strong manures, which are liable to active fermentation.

3. Any soil whereon wheat is grown—if not naturally dry, to be made so by draining.

4. Increased quantity of seed to be sown.

5. Earlier sowing, so as to enable the wheat to ripen at least two weeks earlier than at present, and thus avoid the evil effects of the unfavorable weather which prevails at the particular period on which its ripening is now chosen.

6. Sowing an earlier variety of wheat, with the objects above stated in view.

7. Raking the ground immediately after ploughing in the seed in the fall, and once in the spring.

Thus far of preventive means, now a word or two about remedial ones, to rid the above land to keep off the rust.

After using the precautionary means recommended above, your wheat should be removed, cut it as soon as the grains may be thoroughly formed; never mind if they should be still in the milk, they will get nourishment enough from the stalk to ripen them. By cutting before the straw is heavily destroyed, you not only save the straw, but will get more grain, and better flour than if you wait for it to mature standing in the field in rusted stalks.

SOILS.

We extract the following simple account of soils from a recent Farmers' Journal, Eng.

Mr. W. M. Chatterley delivered his eleventh lecture at Hovey Bower, near Runcorn, on Monday, October 3d, on Soils.

Soils may readily be supposed to partake of the geological character of the formation on which they rest, and such in truth is the case. The time to which the present lectures were limited would not permit the subject of geology, even the geology of Britain, to be discussed; it would, therefore, be sufficient for the purpose to state that the three most generally diffused minerals, viz., clay, limestone and sand, were all necessary constituents of a fertile soil, but that the proportions in which they occurred in different soils varied, and that too in accordance with the geological character of the subsoil. As either clay, lime or sand was the predominant ingredient, soils were classified accordingly into aluminous, calcareous or siliceous soils. Either of these earths alone form a barren soil; sand, as each may be in greater proportion, it imparts to the soil its peculiar character; stiffness, attraction and retention of moisture, hardening into a brick-like consistency, and cracking during dry weather, the characteristics of soils on the clay; great friability, speedy filtration of water, and general dryness, are the opposite characteristics of sandy soils, plain indicating their mutual admixture as a means of remedying some of the defects of either; the rubby or marly character of calcareous soils, allows of speedy filtration, and causes too great dryness, indicating the benefits to be derived from the addition of either clay or sand. An excess of sand is much less injurious than an excess of clay; indeed, all the most fertile soils contain a larger proportion of sand than any other mineral ingredient. The different natural mixtures of these earths have given rise to the different terms by which peculiar soils are distinguished, as loams where clay and sand form the chief constituents, or marls, where clay and limestone meet and abound. The purest clay soils, however, do not contain less than 60 per cent. of silica, while many siliceous soils contain from 90 to 95 per cent. of sand.

Vegetable matter in soils is also necessary to their fertility; and the varying quantity of this material, from about 10, as in garden mould, to 70 per cent., as in peats, gives to these soils the characteristic whence they derive their names.

But, as has been said before, neither the pure forms of clay, sand, or limestone alone form fertile soils, but the contrary; so it is to a proper admixture of these that we must look for the fittest condition of a soil. It generally happens most happily that sand, clay, or lime are found within reach of one another, and ready to be used mutually for the amelioration of the soils, in which they mutually predominate; and it should be remembered that such amendment is permanent.

The other constituents of soils, which are not so abundant, in order that they should retain their fertility, they must constantly contain the alkalies, potash and soda, and the alkaline earths, magnesia, with the sulphuric, muriatic, and phosphoric acids, the peroxides of iron and manganese—these substances serving as the food of plants, while the sand, clay, and limestone form the body of the soil, amongst the particles of which the roots penetrate, and support the plants by their mechanical action.

The chemical properties, however, of the three chief constituents of soils should be attentively considered also, as tending to elucidate many anomalous instances of unproductiveness in particular soils. The attraction of clay for water renders it highly useful in siliceous soils, which have no such property; its adhesiveness tends to bind together the loose falling particles of the sand; while these very properties, when in excess, tend to render the soil unfruitful, and are then to be remedied by mixture with sand or lime, to increase the friability and filtration, and thus, in either case, to permit the passage of a rapid water amongst the particles in the soil in such a manner as to preserve a due but not excessive degree of moisture in the soil, so that it is neither retained too long, nor removed too soon. These three, the chief constituents of the soil, though they may either of them be requisite in a slight degree as the food of plants, are not to be considered in this light merely, but rather as having for their chief use the mechanical duty of affording support for the roots of crops.

The state of chemical combination, in which the various ingredients of the soil are found, also materially influences its fertility, though such combination should differ somewhat for particular crops; for instance, wheat requires that a portion of a silica should be in union with potash, and for clover, that sulphur should exist in the soil in the condition of a soluble sulphate; should the soil, however, contain sulphate of the protoxide of iron, as is the case sometimes in the London clay land, in peat soils, it is altogether injurious, and should immediately be converted into peroxide by exposure to the atmosphere, by frequent and deep ploughing, harrowing, and disintegrating.

Much practical action, as to the mechanical action of the various farming operations, and on the chemical constituents of soils, was added, but it is to the conclusion that the farmer must endeavor to know the quality of the minor, but still, deficiencies of his soil, and for the easiest and cheapest mode of remedying them. There was no reason why a farmer should not be acquainted with chemistry; but if not so himself, there were many of the latter class who now were turning their attention to agriculture as connected with the science, and with whom there would be no difficulty for the farmer to put himself in communication.

The proportions of the chief constituents of soil, best suited for all crops, were then shown to be from 50 to 70 per cent. of silica, from 20 to 40 of alumina, and from 10 to 50 of calcareous matter.

The mode of arriving at a proximate determination of the relative qualities of each of them was then shown. The quantity of moisture was found by drying a given weight in an oven, and finding the loss of weight; the quantity of vegetable matter, by heating a given weight of the dried soil to redness, and retarding the loss; the quantity of soluble salts, by treating a given weight with water, filtering and evaporating the filtered liquor to dryness; the quantity of carbonic acid, by throwing a given weight of dry soil into a given weight of diluted hydrochloric acid, and estimating the loss of weight after effervescence had ceased; the quantity of lime, by filtering the solution in hydrochloric acid thus made, and precipitating by oxalate of ammonia; the quantity of clay and sand, by repeatedly washing a given weight of the soil with water, and pouring off after allowing it to settle for a minute or two until the water was entirely separated, then drying and weighing a bowl.

TOBACCO.—So sensible is every brute creature of the poisonous and deleterious quality of this plant, that not one of all the various tribes of beasts, birds, or reptiles, has ever been known to taste of it. It has been reserved to man alone to make of this poisonous plant an article of daily necessity for the gratification of his depraved appetite.—*The Mirror.*

Sound and Light.—Sir John Herschel says that thunder can scarcely be heard more than 20 or 30 miles from the flash, but that lightning may be seen at a distance of 200 miles.

From the transactions of the New York State Agricultural Society.

AGRICULTURE OF MADISON COUNTY.

Madison county embraces fourteen towns, and contains 5-2 square miles, or 327,000 acres of land, and 40,032 inhabitants.

The surface of this county is much diversified. The elevated ridge which separates the waters of the northern lakes from those of the Susquehanna river, passing through the southern part, renders it, with the middle, more or less hilly and uneven. These hills, however, are not so steep as to unfit for cultivation, and the valleys are extensive and very fertile. The northern section of the county is generally more level.

The county is well watered by streams in almost every part, and in the northern towns of Sullivan and Lenox large masses of gypsum and water limestone, with some iron ore, are found. Common limestone is scattered in abundance over all the middle and northern towns.

The Erie canal and the Utica and Syracuse railroad pass through the upper, and the Chenango canal intersects the lower part of the county, affording fine outlets for all her products.

Soil.—The fertility of the soil is very great; in deed it is supposed, in that particular, to be surpassed by but few counties of the State; and there is but little land within its boundaries that is not well adapted to cultivation.

The northern parts are mostly of a limestone soil, except the low bottoms, which are sandy, and the middle and southern sections may be designated as of a clay loam, based upon shale, or slate rock. It is a fact worthy of remark, that this county seldom suffers from want of rain.

Productions.—The northern part of the county being generally level, is admirably adapted to the growth of wheat and corn.

The centre and more elevated parts produce large quantities of wheat, barley, oats, corn and hops, and the southern parts grow hops, barley, oats, and potatoes, in which latter crop they excel the other parts of the county, both in quantity and quality.

The soil is almost every where natural for grass, the crops averaging from one and a half to two tons per acre, of a superior quality, mostly upland. And this, with but a small outlay, might be easily increased to from 2½ to 3 tons.

The wheat lands, under good management, give from 20 to 25 bushels per acre; barley 35 to 50; and oats from 40 to 70 bushels; in some cases coming up even to 100 bushels per acre. Large quantities of peas are also grown.

The production will appear more accurately by reference to the returns of the census of 1-40, in which year Madison county was shown to have raised

200,242 bushels of wheat,
135,625 do barley,
342,257 do oats,
171,204 do corn,
678,619 do potatoes,
374,021 pounds of wool,
117,370 do hops,
215,619 do sugar,
65,749 tons hay.

Butter and cheese to the amount of \$193,670. Which, together, at the low prices of 1840, yield the amount of \$1,379,345.

Markets.—The farmers of this county usually find a market for their produce with the merchants of the villages, who in turn send it to the city of New York. The cattle fattened for market are driven to Albany and New York city; and those for grazing are sent to Philadelphia, and the farms along the North river.

Cultivation.—Attention to agriculture has been gradually increasing in this county; there is, how-

ever, yet much room for improvement. But little importance is attached to regular systems or rotation of crops. Wheat is raised after summer fallow with two or three ploughings, and the same crops are frequently allowed to succeed each other.

The manure from stables is put generally upon the land, and plaster is also applied to winter grain and grass; but as yet very little value is attached to manure, and no methods are taken to increase it. Lime is seldom employed, although it is admirably adapted to the soil, and composts are unknown. There appears, however, to be a general awakening to the importance of the subject.

Drainage, particularly that under ground, has been partially attempted, but not to any extent, though the soil in many parts would be much improved thereby.

Of grass seeds, clover, timothy and redtop, are sown, the latter on interval lands liable to be flooded. Clover is seldom sowed alone, being usually mixed with timothy.

Top dressing grass lands is occasionally practised, and with great benefit.

The profitable practice of cutting or chopping straw for feeding stock may be said to be hardly known. Straw is generally stacked out, and cattle allowed to take what they want of it. It is also used for littering horses, but there are instances where it is hauled away from the buildings and burnt to get rid of it!

The cast iron plough of various constructions, with cultivators, harrows of different kinds, horse rakes, rollers, &c. &c. are in use, but few of the new improvements in agricultural implements are found here, unless perhaps occasionally a mowing machine.

Animals.—The horses of this county are very good, strong, of good size, well made and admirably adapted to all farming purposes; but they cannot be designated as of any particular strain or blood.

The breed of neat cattle is also excellent; cows on fresh summer feed, giving, in some instances, 25 quarts of milk per day, and generally from 15 to 20. Blooded cattle have not been introduced to any extent as yet. This county, however, at the late fair of the State Agricultural Society at Syracuse, was among the successful competitors for premiums in that line. Deceivers from the east say that they find about the best of cattle in this county and neighborhood.

In swine but little pains have been taken. The pork of this county is, however, very good, and in many instances Berkshire hogs have been successfully crossed with the (so called) native breed.

The sheep of the county are generally Merino and Saxony. Formerly large flocks of tall blooded animals of these breeds were found throughout the county, but now they are more mixed; attention not having been paid to keeping them separate.

Except by some few of the best farmers, no pains are taken to shelter sheep in winter. They are kept, usually in flocks of from 70 to 160, and from 300 to 1000 on a farm. The southern part of the county has been much afflicted with the rot or "foul air," which breaking out in large flocks where the frost at season could not be given as to smaller ones, did much damage. It is, however, now rather diminishing. As to the cause, farmers here, as elsewhere do not agree, each one having a theory of his own.

By the census before referred to, it appears there were in the county in 1840,

9,358 horses and mules,
42,191 neat cattle,
186,616 sheep,
39,657 swine.

Value of Land.—Land in this county may be said to rise in value from \$10 to \$100 per acre, generally increasing from \$20 to \$50; and the size of farms to

range from 50 to 600 acres; for the most part comprising from 100 to 150 acres each.

Timber.—The prevailing timber of the northern part of the county is maple, beech, oak and pine; and of the middle and southern sections, maple, beech, hemlock and bass. There is, however, throughout, a great variety, comprising walnut or hickory, ash, birch, elm, spruce, white cedar, chestnut, fir, butternut, poplar, balsam, whiteoak and sycamore.

In conclusion: with regard to the "changes necessary to advance the agricultural prosperity of the county," it may be said, that the general diffusion of agricultural intelligence and disposition to seek for and take advantage of the improvements adopted by others, is all that is wanting to place this county in the rank which the bounty of nature has intended it to assume.

For this purpose no better means can be devised than attention to the different agricultural periodicals now published; which, from the extreme low price of subscription, are available to every farmer however small his means. The Genesee Farmer or the Cultivator should be in the hands of every one. These contain the results of the experience of our neighbors, and affording the means for the general interchange of ideas, cannot be too highly prized.

The Agricultural Society of the county, also, which has been but lately established, will, it is hoped, do much towards its advancement.

We add a second account of the Agriculture of Madison County from an experienced hand.

The county of Madison contains a diversity of soils, and may be said to vary much in its climate; as the northern part, between the Erie canal and the Oneida lake, is in general only between 350 and 400 feet above the level of the tide waters, while the central and southerly, and southwesterly parts rise in ranges of hills to the height of from 1600 to 1800 feet above the level of tide waters. There is always a marked difference in the time of the ripening of grains and the general maturing of crops between the lower and more elevated parts of the county—always being earlier in the northern and lowest part. The lands from the Oneida lake south to the Erie canal are level, the lake being only about 45 feet lower than the long or Utica level of the canal, and are generally a rich alluvial soil, some districts of which are well adapted to the culture of the different kinds of grains, and all, or most of it, is considered a great grass growing district. Immediately south of the Erie canal, generally the land commences to rise until it terminates in the elevations before mentioned. A belt of land south of the Erie canal for some distance as it rises in the vicinity of the lime and gypsum formations, passing through the towns of Sullivan, Lenox and Stockbridge, is undoubtedly the best wheat district in the county, and also excellent for all other grain crops. There is another district of land, different from the lands of the county generally, and may be termed table land, and is of a general elevation of 800 feet above the Erie canal at Utica. This section of land commences in the east and northerly part of the town of Madison, passing west and south-westerly quite through the town into the easterly part of the town of Eaton; thence more southerly through the west and southwest part of Madison, east and southeast parts of Eaton, west part of Hamilton and east part of Lebanon, to the south line of the county, and passes into the county of Chenango from Hamilton, bounding the northern entrance of the Chenango valley. All of this district of land (or principally) is a very deep and porous loam and gravel soil; some parts sandy loam and gravel, and is a strong and fertile soil, and is peculiarly adapted to Indian corn, which has

matured on this land in the month of May.

This district of land is also adapted to every other of the straw grains cultivated in our country, and invariably produces heavy crops, and is a natural grain growing district. Most of the town of Cazenovia is also adapted to the culture of grain.

There is in fact but little of the highest lands in the county but what produce good crops of spring wheat, barley and oats, and Indian corn matures on it in favorable seasons. Barley is shipped to the Albany market to some extent, but the surplus grain generally finds a market at the extensive distilleries in this and the adjacent county of Oneida. This county is susceptible of producing an amount of grain for export vastly larger than it does. Notwithstanding, as a whole, it is a better grazing than a grain growing county. It is probable that there will always be sufficient of the grains produced in the county for home consumption, and a considerable surplus for market, and particularly of the coarse grains. When the county was new, winter wheat was raised in abundance, even on the hill land, and on the first summer following of pasture lands, heavy crops of winter wheat were produced, and were not hurt out by frost. No one then doubted but that it would always be a wheat country, and to a considerable extent it might still be, but for the action of the frost on the hill lands, heaving out the roots of winter wheat. There is but little hill land that has been pastured a few years and then summer fallowed, but has strength of soil sufficient to produce a heavy crop of winter wheat, and have it fill well when the action of the frost is prevented, which has been sufficiently proved; but spring wheat on the hill lands generally is cultivated, on account of the precariousness of winter wheat; and the variety which obtains most favor is the Italian.

It has been abundantly proved, that spring wheat, barley, and oats, can be advantageously produced on our uplands, on greenward turned over. But as a whole, the true interest and most permanent wealth of the inhabitants of the county, lies in the cultivation of the grasses, on which the greater portion of the farmers of many sections of the county, have for many years bestowed their chief attention, and in rearing neat stock for store cattle, fattening, and for the dairy, and numerous flocks of fine woolled, and other grades of sheep; which has been a lucrative business, having made many farmers wealthy, and all those in a thriving condition. The soil of the hill lands of the county, differs much from the table lands and the valleys, being generally free from gravel, and is generally composed of a rich loam and vegetable matter. The loam, in many places, is of a dark or chocolate color, in other places of a lighter color, inclining to yellow.

The native growth of timber is maple, beech, white ash, white and red elm, hatternut, cherry, some birch, in many places considerable hemlock, batternut hickory, and in the northern and northwestern parts of the county white and black oak, and hickory; and in swamps, white pine, cedar, and black ash. There are some upland pine lands, but they are not extensive, and the timber has principally been converted into buildings. The neatstock of the county is short of the native breeds; there are not many Short Horn Durhams, though some. There is yearly a considerable number of neat cattle fattened for market. The principal article of food in fattening them, is the potato; but Indian meal, barley and oat meal, is also used as feed with the potato, and also oil cake. Pork is also fattened extensively on potatoes boiled and mixed with barley, and oat-meal, peas, and some Indian corn is fed towards the close of the fattening, but is not extensively fed. Good and heavy pork is made by the above mode of feeding. Those who keep a dairy, fatten hogs on the refuse of the dairy.

Swine consist of various breeds, and crosses, and are much improved since the first settlement of the county, and are still improving. Berkshire, and crosses from them, are becoming common, and are in high repute.

Of sheep the Merino and Saxony have prevailed, with every imaginable grade, by crosses on the native breeds.

As a root crop, potatoes prevail vastly over all others, and are extensively cultivated both for fattening domestic animals and for feeding store cattle; and are abundantly produced, or can be, on most soils in the county. The ruta baga has been cultivated by some, but has not obtained favor with the farmers generally. Carrots are cultivated to a limited extent by some, and fed to milk cows and other stock, and are held in high repute. Hops have been extensively cultivated from an early day in this county, and yet continue to be, which has been a source of considerable wealth to those engaged in that culture.

The ploughs in use are the cast iron, of various patterns, no one prevailing exclusively. Double or single harrows, are much used of late years, and are considered a great improvement in that article. Cultivators of several models are used among corn, and are considered an improvement by many, over ploughing among it, at the time of hoeing.

Of grasses for mow-lay, timothy or herds grass, is mostly cultivated, clover mixed with it to some extent. On wet or swampy lands, red top or foul meadow. The principal grasses cultivated in the county for meadow and pasture, are red and white clover, herds grass or timothy, red top and foul meadow. Spens or June grass, grows spontaneously without cultivation. Some orchard grass or *Dactylis glomerata*, is cultivated by some, and produces an excellent hay, and an abundant growth of feed for pasture, and for that purpose is most valuable, starting earlier in the spring, and after being mowed or fed off, enduring the drought better, and yielding feed later in the fall than any other, and its roots never winter killing, and is easily subdued. Its culture should be extended, and particularly for pasturage. The greater part of the county being hilly with numerous valleys of rich land, the hills abounding with springs, which water the valleys, peculiarly adapts it for a grazing and stock growing county; and all the best grain districts will also produce good meadows and pasturage. The fat cattle and sheep, pork, butter, cheese and lard, are principally sent to, or purchased for the New York market.

Store cattle and swine are either sent to, or purchased for the different eastern markets. The aggregate annual value of grain, store and fat cattle, pork, lard, and store swine, store sheep and wool, hops, and the products of the dairy, that are sold at the different markets, I have not the statistics of before me, but which I think amounts to nearly \$2,000,000.

Wool is one of the principal staples, some of which finds a market at the manufactories of this and the adjacent counties; but it is mostly purchased by wool staplers for the manufactories in the New England States.

In addition to farmyard manures, gypsum is used to a considerable extent as a fertilizer, particularly on pasture and meadow lands.

In regard to rotation of crops, the practice that most prevails, and particularly on the gravel table lands, is, to spread the stable and barn-yard manures on the greenward of pasture or meadow lands, carefully turn it under, pass over a roller, drag with a light harrow, and plant Indian corn, dress the crop with a cultivator, and hoe twice; and it is not uncommon to obtain a yield of from sixty to seventy bushels per acre. The succeeding spring this land is sown with

barley, and it produces a heavy crop; the stubble is then turned under and sown to winter wheat, and seeded to grass; the wheat yielding generally a heavy crop, and the land left in a better condition than before. The same rotation prevails to some extent on the up or hill lands, except sowing spring grain, generally after barley; the crop of winter wheat being more precarious on such land.

In regard to the culture of silk, a number have commenced the business on a small scale, and their experiments have generally been satisfactory, demonstrating that it can be made a lucrative employment for females, and the labor of children. In fact, there cannot be for females so lucrative a domestic employment, to those who wish to be industrious, as the culture of silk, and of manufacturing the raw material into sewing silk and various articles of dress, both for use and ornament, for which the ingenuity of the fair of our country are distinguished. But the natives must finish the planation of mulberry trees.

The Morus Oregona, or Oregon Mulberry, was introduced into this place by me, some five years ago, or five years next spring. They prove to be hardier than any other kind or variety with which I am acquainted, and I have ten different kinds and varieties. My new plant has endured the rigors of our severe winters, without injury, where the Italian, or Morus alba, standing beside them, would be killed, both if the branches and the main stem. I have them growing at an elevation of about 1300 feet above the level of the tide waters at Albany, and nearly 43° N. latitude, and flourish well. The leaf of this new plant is larger than the Multicaulis usually is, and is much thicker and more heavy, being a more fleshy leaf than any other of the mulberry species known to me, with but very little woody fibre in the leaf; and it contains much more milk juice, and less of water, than any kind known to me. I have fed the leaf of this new plant to silk worms, four seasons, and in all cases my worms did better, fed with this leaf; were more healthy, and made better cocoons, than those fed on the other kinds; and in all cases, produced a finer and more flexible filament, and of a richer and more brilliant lustre than I have ever seen on any silk other than this, either foreign or domestic; and the silk has been so pronounced, by hundreds of the best judges of the article. This tree will certainly be an acquisition to silk culturists, particularly in the northern States, as the culture of silk progresses, and the merits of this tree becomes known.

In regard to the value of lands, there is but little improved or partly improved, in the remotest situations but will sell for \$20 per acre; and better lands, and more favorably situated, are valued from \$25 to \$35 per acre; while the best situations, of farms, both in regard to the roughness, soil and buildings, are valued at from \$40 to \$60 per acre. Farms have been sold as high as \$60 per acre; but the average value of land in the county, I think, would not exceed \$25 per acre.

The Names of Plants and Flowers.

It is proposed to substitute plain English for the dog latin terms at present applied to plants and flowers—an attention which would, we think, be advantageous, and meet with general approval. Cable, whom nothing was too minute to escape, has admirably ridiculed this botanical pedantry:

“High-sounding words our worthy gardener gets,
And at his club to wondering swains repeats;
He there of Rhina and Rhododendron speaks,
And Allium calls his Onions and his Leeks.
Nor weeds are new; from whence arose the weed,
Scree plants, fair herbs, and curious flowers proceed;
Where cuckoo pints and Dandelions sprang,
(Grass names had they our plainer sara among.)
There Aronis, the Leon-tortions we view,
And Artemisia grows where Wormwood grew.”

THE NEW GENESEE FARMER
AND GARDENERS' JOURNAL.

Vol. IV, for 1843.

Published by C. F. CROSMAN and E. SHEPARD, Rochester. Sixteen pages monthly, enlarged and improved: price \$1 per year.

The character of the Genesee Farmer, both old and new, has been well known, and its ability and usefulness universally applauded. Published in one of the best farming districts in the world, and in one of the finest and busiest cities of the growing west, the very home of active industry and intelligence, where information and mechanical talent of the highest order are concentrated. No pains will be spared to make it all that such a paper should be.

Under present arrangements, Mr. Colman is expected to continue in the editorial department for the first third of the year; and whenever he retires from its supervision, it will pass into able and competent hands, who will do justice to the paper and its subscribers. Mr. Colman contemplates an agricultural Tour in Europe, and will be a regular correspondent of the paper through the year.

Mr. Bateham, as traveling agent and correspondent, designs to spend most of his time among the farmers, observing their condition, and operations, and his contributions will be interesting and practical. The numerous and able correspondents of the N. G. Farmer, it is expected, will continue their valuable contributions. With these arrangements, the proprietors feel assured that the long tried friends of the Genesee Farmer will not desert the paper; but will use their influence to extend its circulation and usefulness. If each subscriber would make it an object to procure one other, he would render an essential public benefit. The correspondence being extended throughout the country, the paper will embrace the husbandry of the whole: of New England, the Canadas, the Middle, the Southern and Western States; and it will communicate the fullest intelligence of the progress of agriculture in the old world. Being connected with an extensive Agricultural Establishment for seeds and implements, under the management of one of the Publishers, it will furnish information of all improvements in these departments. The proprietors will use their utmost endeavors to concentrate the best talent in its management; to have its mechanical execution and appearance greatly improved, and to render it entirely worthy of the patronage of practical and intelligent farmers.

SIX COPIES will be furnished for \$5. THIRTEEN COPIES for \$10. ON TWENTY COPIES and over, a discount of thirty per cent will be made. Bills of all specie paying banks will be taken at par.

Editors who will give this prospectus one or more insertions, will be entitled to receive one volume of the paper without an exchange.

POSTMASTERS are permitted by law to remit money free of postage. The friends of agriculture are respectfully requested to assist in obtaining subscribers. Back numbers or volumes can be furnished.

Communications on business or for the paper, may be addressed to CROSMAN & SHEPARD, Rochester.

Wayne County Agricultural Society.

From some strange circumstances, the following errors occurred in the account of this society in our last number, some of which wholly alter the meaning:—

For 'eight months' read October.

10th line, for 'difference' read 'deficiency'.

43d line, for 'half blood' read 'half-bred'.

52d line, for 'and' read 'are'.

64th line, for 'in' read 'r'.

Last line, for 'J. T.' read 'N. B.'.

European Agricultural Tour and Survey.

Several gentlemen, interested in the advancement of agricultural science and improvement and of rural education, have proposed to Mr. Henry Colman, late Commissioner of Agricultural Survey of Massachusetts, to visit Europe for these objects. The plan is him to spend a year in England in the examination of the Husbandry and Rural Economy of that country, and a year on the Continent in the examination of French, Flemish, Swiss and German Husbandry, and especially the Agricultural or Manual labor Schools and the experimental farms.

It is thought that such an examination, as yet never undertaken by an American, might, if well conducted, essentially conduce to the advancement of agricultural knowledge and improvement in this country, and especially serve the cause of moral and practical education, which is now exciting great interest throughout the United States. The general plan of the Survey will conform to Mr. Colman's Survey of the Agriculture of Massachusetts.

It is proposed to publish his reports in successive Nos. The first number is expected to appear by the first of January, 1844, and summer is preferable. The rest of the numbers will follow in convenient succession at intervals of two or three months.

The whole work will be comprised in eight, or at most ten, numbers of at least 100 pages each, handsomely printed in an octavo form, stitched and covered, and embellished with necessary and useful drawings and engravings, title pages and index.

The cost will be fifty cents each number to subscribers. Gentlemen who subscribe are understood as subscribing for the whole work.

As the enterprise involves of necessity a large expense, it is expected that one dollar per copy will be paid on subscribing; or otherwise, one dollar on the delivery of the first number; one on the delivery of the second number; one on the delivery of the fifth number; one on the delivery of the seventh number; and one on the delivery of the ninth number, should the work be extended to ten numbers.

Mr. Colman will leave for Europe as soon as the subscription will warrant the undertaking.

An early return is respectfully requested of gentlemen to whom this is sent, addressed to Henry Colman, Rochester, N. Y., to Little & Brown, Boston, Mass., to Charles S. Davis & Co., No. 252, Broadway, New York; or to Luther Tucker, Cultivator Office, Albany, N. Y.

October 4, 1842.

To Subscribers and Correspondents.

The December number of the Genesee Farmer has been delayed until this time, on account of the new arrangements made necessary by a change of proprietorship, and Mr. Colman's preparations for his Foreign Tour. Every effort will be made hereafter to ensure punctuality of publication and delivery.

Several cases have within a few months come to our knowledge of a failure of the receipt of the paper on the part of our subscribers. Much of the blame, we fear, to our great regret, belongs to ourselves; but the cause, which we have suspected, has been discovered; and we trust there will be no more reason for complaint.

The Editor was anxious to mention particularly, in this number the receipt of many valuable communications. He has not room to do this; but they have been received with great respect; and his friends may be assured shall be duly acknowledged.

Monroe County—Notice.

The annual meeting of the Monroe County Agricultural Society will be held at the Arcade House, Rochester, on Wednesday, the 4th of January, at 11 o'clock, A. M., when the premiums will be awarded on Roots, Grain and Field Crops, and officers will be elected for the ensuing year.

Competitors for premiums on crops are requested to be particular in making out their statements and certificates—as required by the law of the state—(see the Sept. No. of the current vol. of the Farmer,) and it is very desirable that the claims and certificates be handed to the President or Secretary as early as the 1st of January.

METEOROLOGICAL OBSERVATIONS.

MADE AT THE ROCHESTER COLLEGIATE INSTITUTE BY L. WETHERILL, NOVEMBER, 1842.

Date.	Barometer.		Th. at sunset.	Mean.	Winds.		Weather.		Rain Gauge.
	5 o'clock P. M.	10 o'clock P. M.			A. M.	P. M.	A. M.	P. M.	
26	31	51	42	42.80	w	w	fair	sw	
27	37	44	37	38.16	n w s	w	rain	fair	.06
28	30	52	45	44.5	s w s	s	fair	fair	
29	43	54	45	47.5	s w e	f	fair	fair	
30	44	50	42	44	e	e	cl'dy	fair	
31	36	50	56	51.5	s w s	w	fair	fair	
1	43	57	46	48.83	s w e	n e	fair	cl'dy	
2	44	43	40	42	n e	n e	cl'dy	fair	
3	32	44	37	36.23	s e s	e	fair	fair	
4	27	46	35	35.53	s w s	w	fair	fair	
5	22	56	43	46	s	s	fair	fair	
6	41	61	50	53.60	s w s	w	fair	cl'dy	
7	48	4	46	46.25	s e e	n e	cl'dy	cl'dy	
8	42	43	41	43.33	s e s	n e	rain	rain	
9	44	44	33	38	w	w	rain	cl'dy	1.6
10	50	40	34	37.16	w	w	cl'dy	8 s	
11	37	45	36	39.5	s w s	w	cl'dy	rain	.59
12	34	43	41	44.85	s e s	w	cl'dy	rain	.12
13	39	43	37	39	w	w	rain	rain	.94
14	55	39	40	37.5	s	s	rain	rain	
15	32	43	33	35.82	w	w	fair	fair	.15
16	51	38	36	35.83	s	s	cl'dy	cl'dy	
17	26	41	42	38.66	s	s	cl'dy	rain	
18	30	28	21	25.33	w	w	cl'dy	cl'dy	.29
19	21	32	28	28	w	w	fair	fair	
20	24	32	28	28	w	w	fair	fair	
21	21	31	26	26.66	w	w	cl'dy	cl'dy	
22	22	32	30	29.55	w	w	cl'dy	cl'dy	
23	20	40	37	35.53	s w	w	cl'dy	cl'dy	
24	31	35	28	29.66	w	w	fair	fair	
25	31	35	31	29.16	s w	w	cl'dy	cl'dy	

Range of Thermometer for the month, 43 deg.

The fall of rain for the month of Oct. 2.20 inch.

Mean Temperature of " 15.42, 42.31 deg.

" " " 14.41, 44.46 "

" " " 18.10, 47.23 "

Remarks on the Weather from October 26th to November 25th.

Oct 26th, slight showers this afternoon; 28th, frost this morning; 29th, Indian summer commences—continues to the end of the month.

Nov. 3d, severe frost this morning—wild geese seen; 6th, Indian summer continues—it has been very fine for several days; 8th, commenced raining but subsiding about 11 o'clock and continued, rainy through the day; 9th, rainy this morning, snow this afternoon, first this autumn; cleared off at sunset; 10th, commenced raining about noon; 15th, pleasant and warm early in the evening—Ther. 46; rain, wind, snow and frost during the night; 19th, snow storm last night, with high wind; 20th, high wind, with snow squalls; 21st, snow last night. The week ending Nov. 24th, has been very cold and windy—much colder than the corresponding week of last year. The navigation on the Erie canal has closed during this week.

Winter seems to have commenced quite early: Nov. 23d, at the rising of the moon this evening between 8 and 9 o'clock, there appeared a cold of 15 degrees in length, as I judged, above, of remarkable brightness.

ROCHESTER SEED STORE AND SEED GARDEN.

NEW ARRANGEMENTS.—C. F. CROSMAN having purchased the entire business and effects of the Rochester Seed Store, desires to inform the Agents, Advertisers, and all who may wish to patronize the establishment, that he is now bringing in from his large seed fields on Abolus street, a complete assortment of such seeds as are best raised in this climate, and the will import from the first seedsmen in Europe and elsewhere, such kinds as are better raised in other climates. And seeds of doubtful value will be thoroughly tested by sowing, and none offered for sale that such as can be warranted genuine. The proprietor is fully aware that his large price is the consequence of the quality and purity of his seeds, and he trusts that his customers will be satisfied with the quality of his seeds in a manner that will prove satisfactory to the public.

Rochester, Oct. 1.

C. F. CROSMAN.

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